THE AUTOMOTIVE EDGE™

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NATIONAL LOCKSMITH
AUTOMOBILE ASSOCIATION™

2008 Ford Taurus X

ALSO IN THIS ISSUE:
2008 MERCURY GRAND MARQUIS LS
2008 FORD ESCAPE VEHICLE OPENING

The Ford Taurus X is a new name for 2008. Ford has rebadged the Ford Freestyle body, with the successful Taurus name, in hopes of increasing customer acceptance. The Taurus X is a crossover vehicle, which combines station wagon styling with minivan three row seating and SUV high seating. The Freestyle name was not carried over from 2007. The X got a boost in power, with a more powerful V-6 engine and a six-speed transmission. The Taurus X is equipped with side and side curtain air bags, standard in all trim levels. The air bags are not contained in the doors or door panels.

The Ford Taurus X has three key accessed lock cylinders. The ignition, driver's door and glove box cylinders are the only key operated locks. This vehicle uses the Ford eight wafer configuration, serviced by the 0001X–1706X code series. Tumbler positions are new in 2007 up vehicles, and will be shown as each lock cylinder is serviced.

This vehicle will be found with the Ford (Strattec 692813) three button IKT (Integrated Key Technology) fob key, which remotely locks and unlocks the vehicle, and has an emergency alarm function. It may also be found with the Ford (Strattec 692395) four button IKT, if it is equipped with a power lift gate. Either model will accept and program the Strattec 599114 non IKT Pats III key. If you are programming with the TCODE Pro, you will use the PATS 4 CAN setup and procedure. The latest update for the NGS Star Tester (Hickok) was unable to program this vehicle. (There may be a newer release.)

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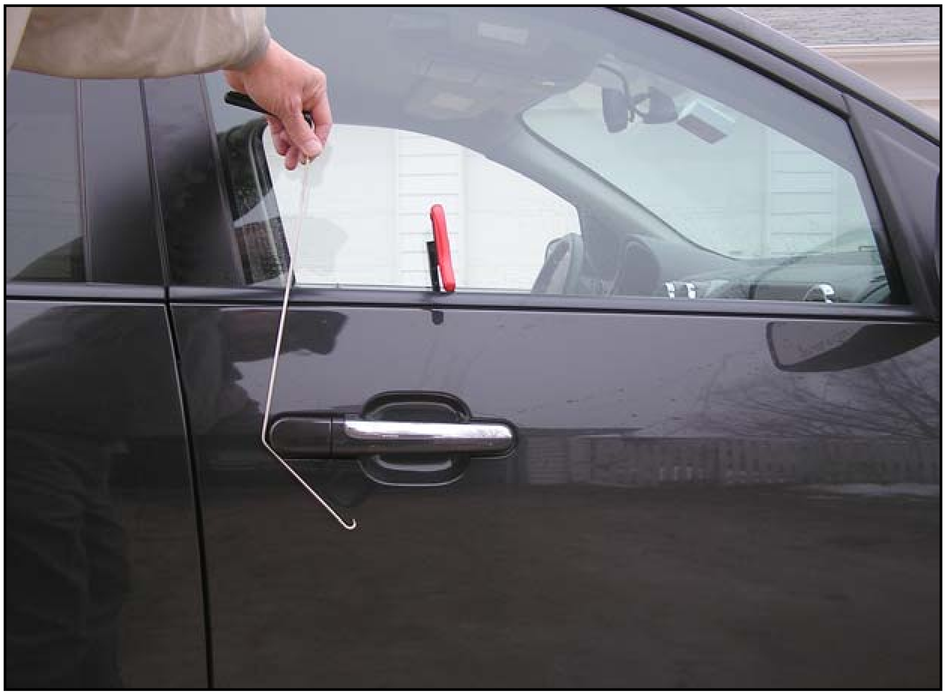
Here are the two best websites for Automotive Locksmiths:

www.TheNationalLocksmith.com
Chat, Forums, Editorial, Online Store, Tech Support

www.Laserkey.com
Product & Technology Sales, Transponder Information Resources

1. The rear lift gate is locked and unlocked electrically. When unlocked by the door panel central locking control, or the RKE Integrated Remote Keyless Entry fob control, the lift gate can be unlatched electrically. The latch control switch is located under the center of the license plate illumination bar on the lift gate. The electrical switch is covered by a soft rubber weather tight shield. When enabled by the lock/unlock control, depress the switch to unlatch the lift gate. If the auto is locked, the latch control switch will be disabled. There is no external access to bypass the lock/latch.

In the event of a malfunction in the latch mechanism, or a jamb, which prevents the lift gate from opening by the external electrical switch, you will find a small access panel in the inside trim panel, which allows access to the latch mechanism. The access cover is secured byfour plastic friction catches. Pry up at the top or bottom of the panel, to gain access.



2. There is no lock cylinder in the passenger door, but the door can be easily unlocked from this side. The vertical lock button can be seen through the window, at the rear of the door panel.

Carefully wedge the weather strip away from the glass, about ten inches forward of the rear corner of the passenger window. This is a tight door, so use a plastic wedge and separate the weather strip only far enough to allow the opening tool easily enter the opening between the glass and the weather strip. Over wedging will damage the rubber or cause the weather strip molding to separate from the metal door panel.

This photo shows the position of the tool when inside the door. The tool being used is a small up-hook wire tool. Any up-hook wire tool should work. Lower the tool into the door to a depth of about four inches below the lift handle, as shown.

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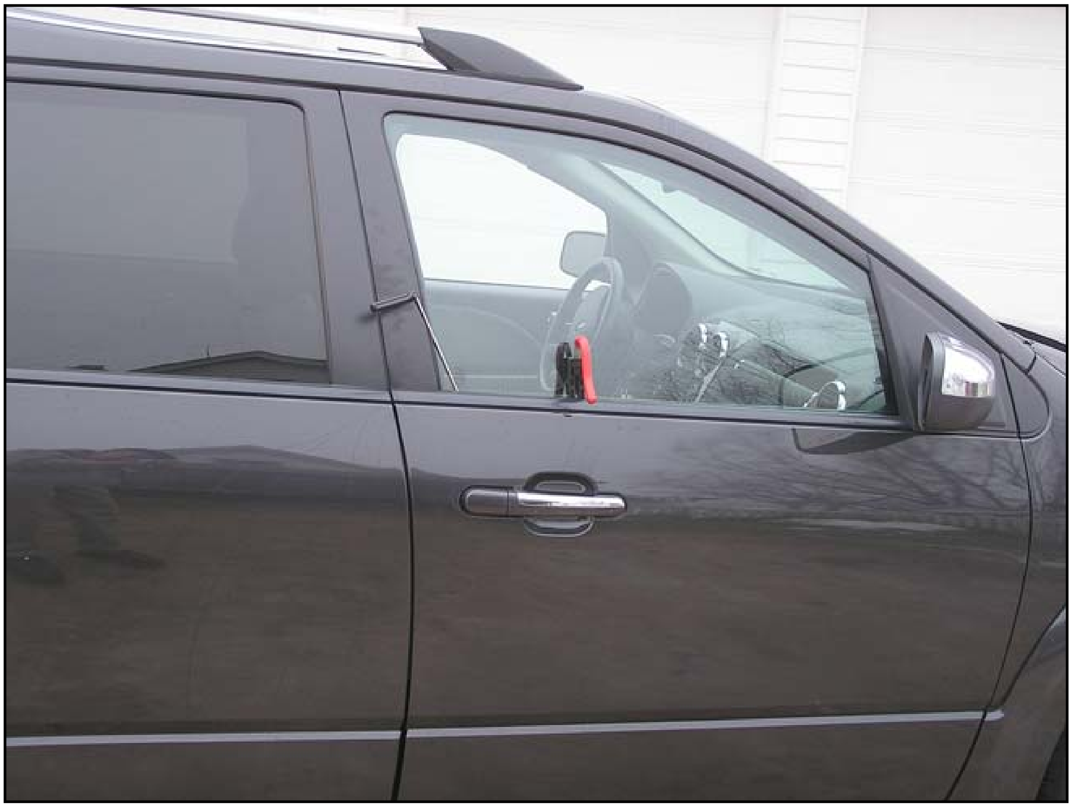
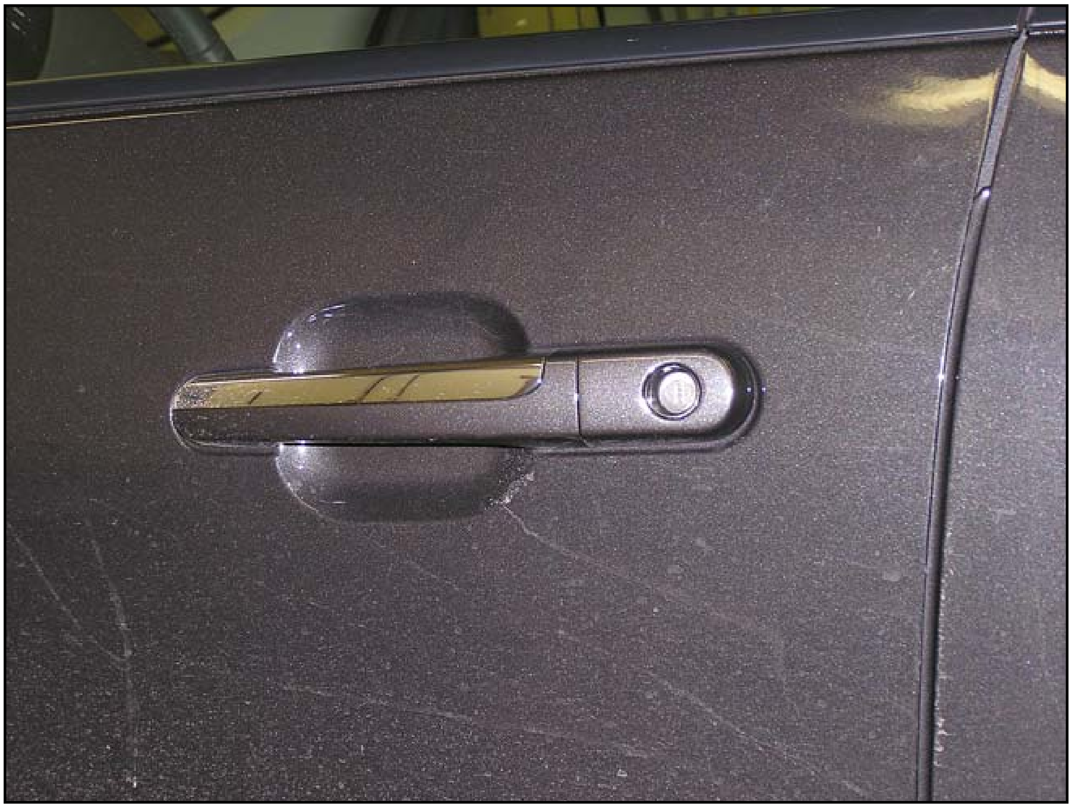
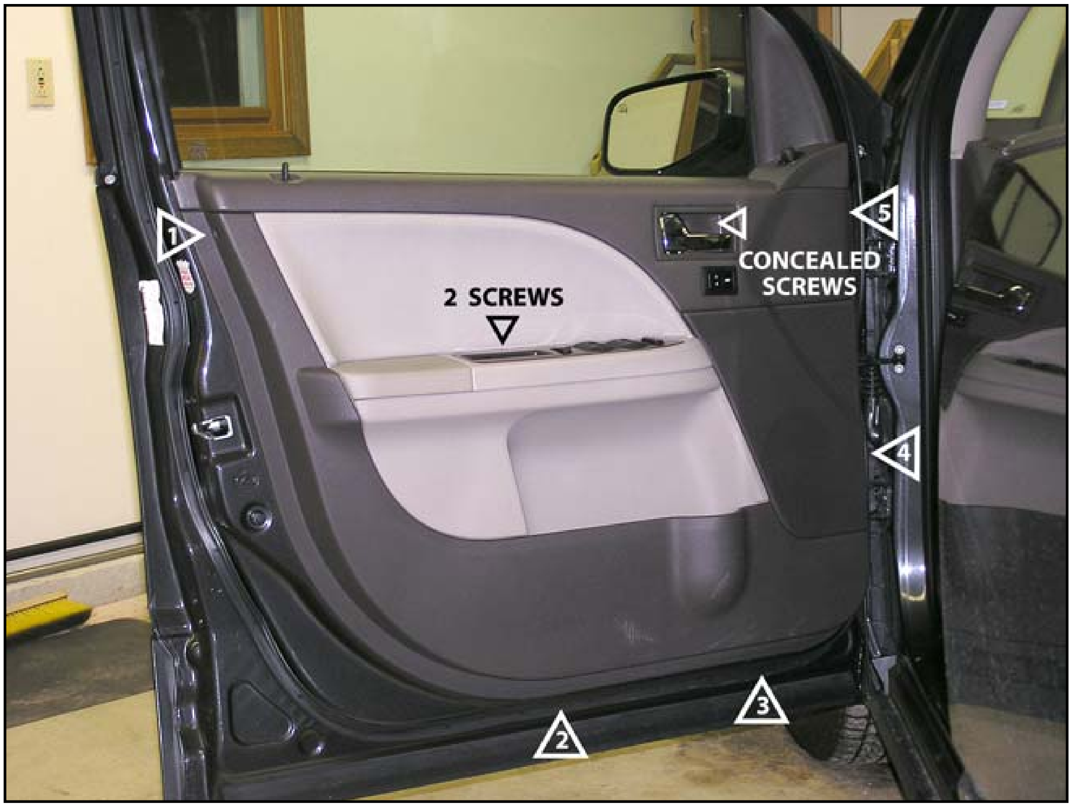


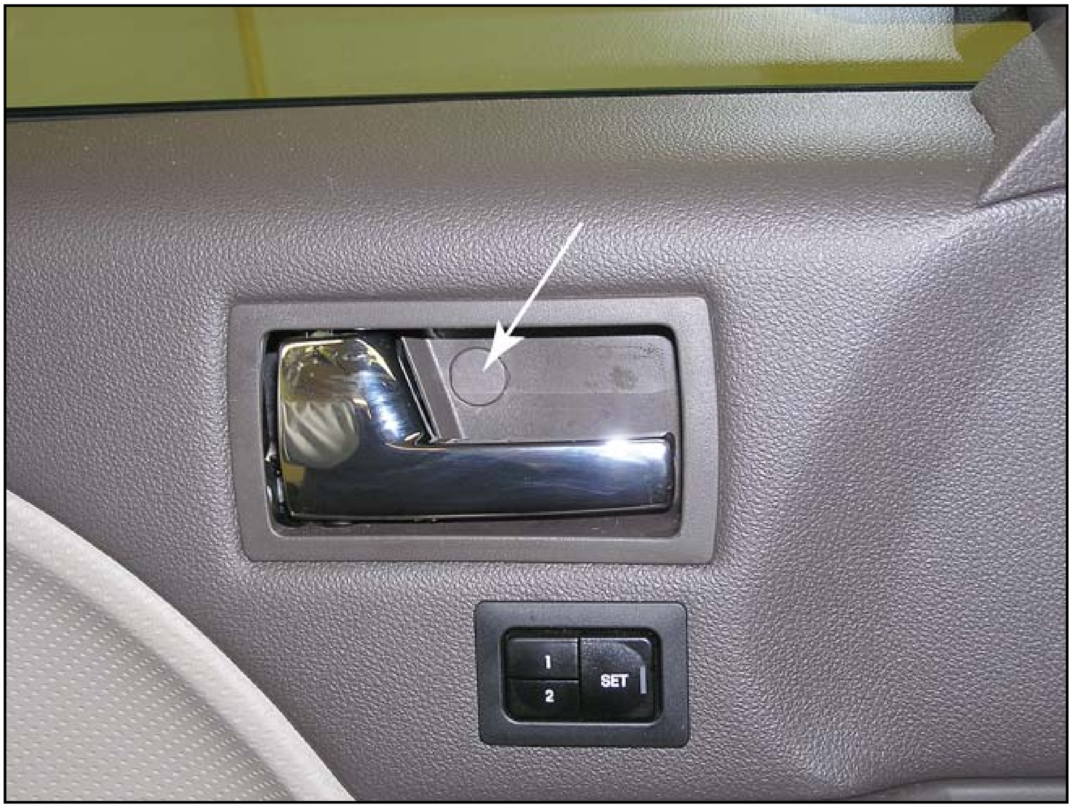
3. This photo shows the opening tool in the working position. Pull up and toward the rear of the vehicle to raise the lock button. The door should be open. Always work on the passenger door, as it contains no electrical wiring in the area of the lock button linkage.



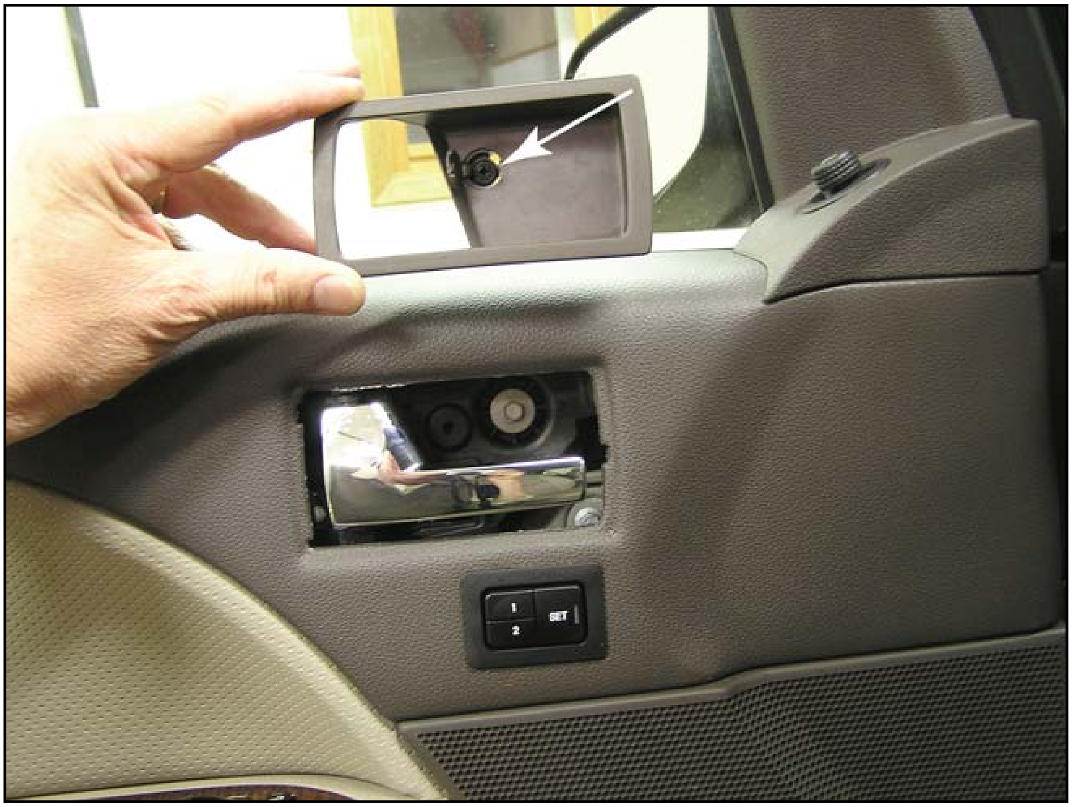
4. The driver's door contains the only lock cylinder found on the exterior of this vehicle. The door lock cylinder is mounted in/under the rear trim cap of the pull handle. The lock cylinder can be removed through the inside of the door.

5. The driver's door trim panel shows only five screws. The Phillips head trim screws are located: one at the top rear of the panel, two at the bottom edge of the panel, and two on the front edge of the panel. Remove the five Phillips head screws. The panel is also secured by two 7/32" hex head sheet metal screws in the pull handle finger well. The screws may be concealed by a flexible rubber pad in the bottom of the finger well. Remove the pad to reveal the screws. Remove the two attachment screws.



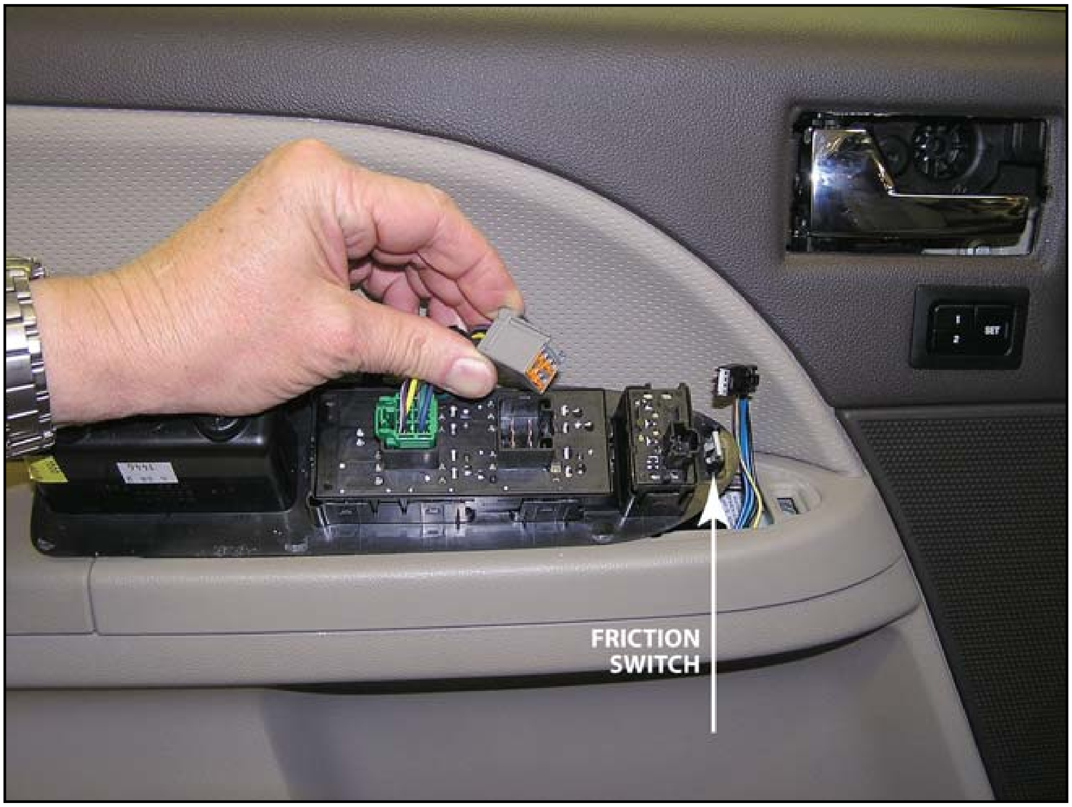


6. The door latch pull handle trim is secured by one Phillips head trim screw. The screw is concealed behind a plastic friction plug seen here. The trim plug is hinged to the handle trim, at the rear of the plug. Pry up on the plug at the front, to reveal the trim screw. Remove the Phillips trim screw to free the trim piece.

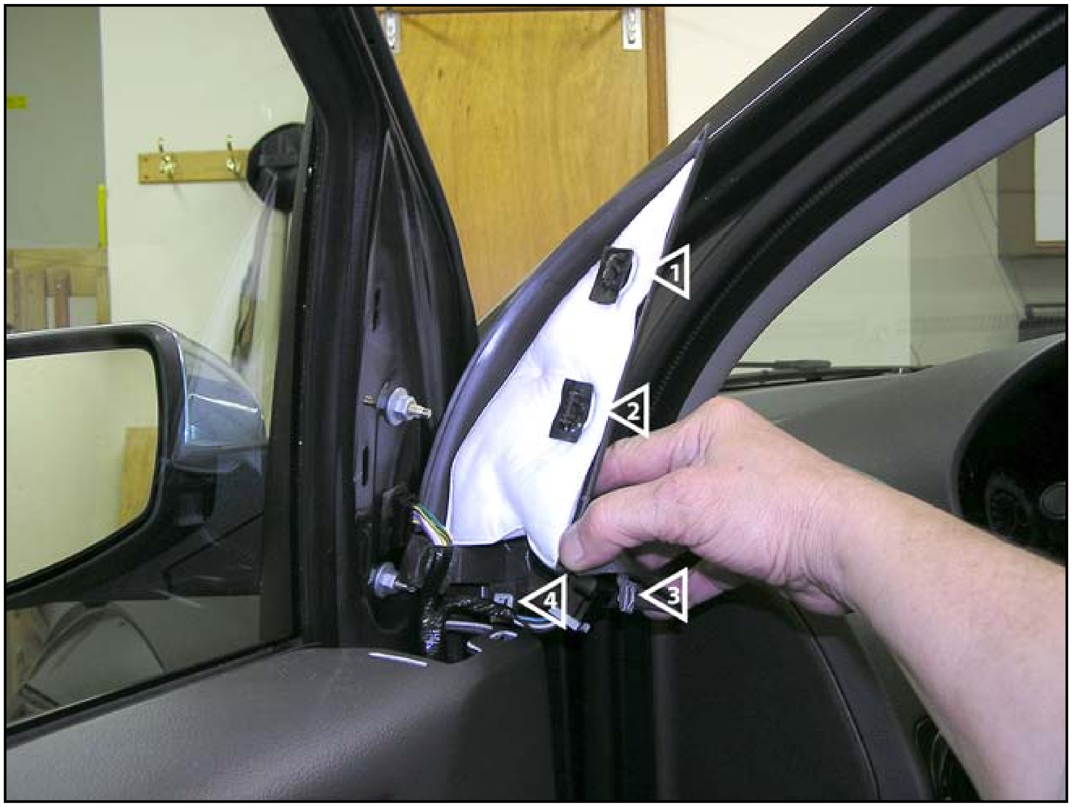


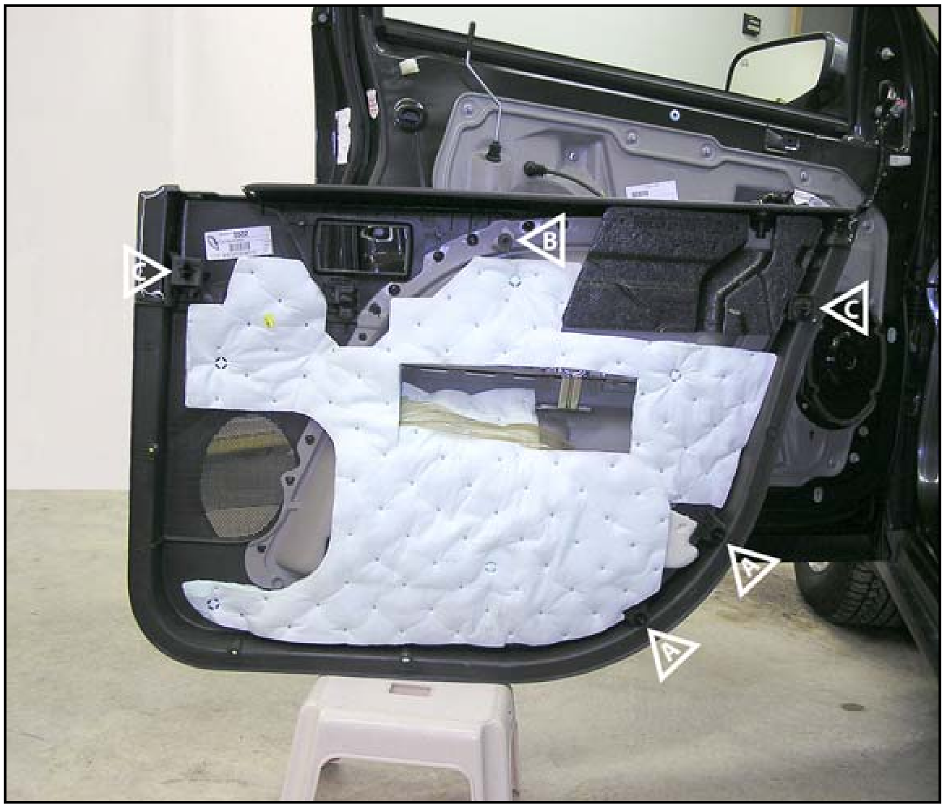
7. The friction plug is attached to the handle trim. The screw hole for the trim screw is made to retain the trim screw with the trim as it is removed. It is not necessary to completely remove this screw. Under this trim is a 5/16" hex head sheet metal screw, which secures the pull handle to the metal door body. It is not necessary to remove the pull handle mechanism.

8. The electric window regulator and central lock control panel was secured at the rear by the screws found in the finger well. After removing the two hex head sheet metal screws, lift on the rear of the panel. The front of this panel is secured by one flat friction catch. Pry up gently at the front of the panel to free the friction catch. Three electrical cable connectors will be found on the underside of this panel. The front connector is for the door lock switch. The window regulator connectors are at the rear. The three cable connectors are all retained by similar squeeze type connector locks. Squeeze the plastic lock tab and carefully separate each connector plug from the control panel. The plugs are made so that you cannot accidentally interchange one for the other. Do not "tug" on the wire harness to separate these connectors.

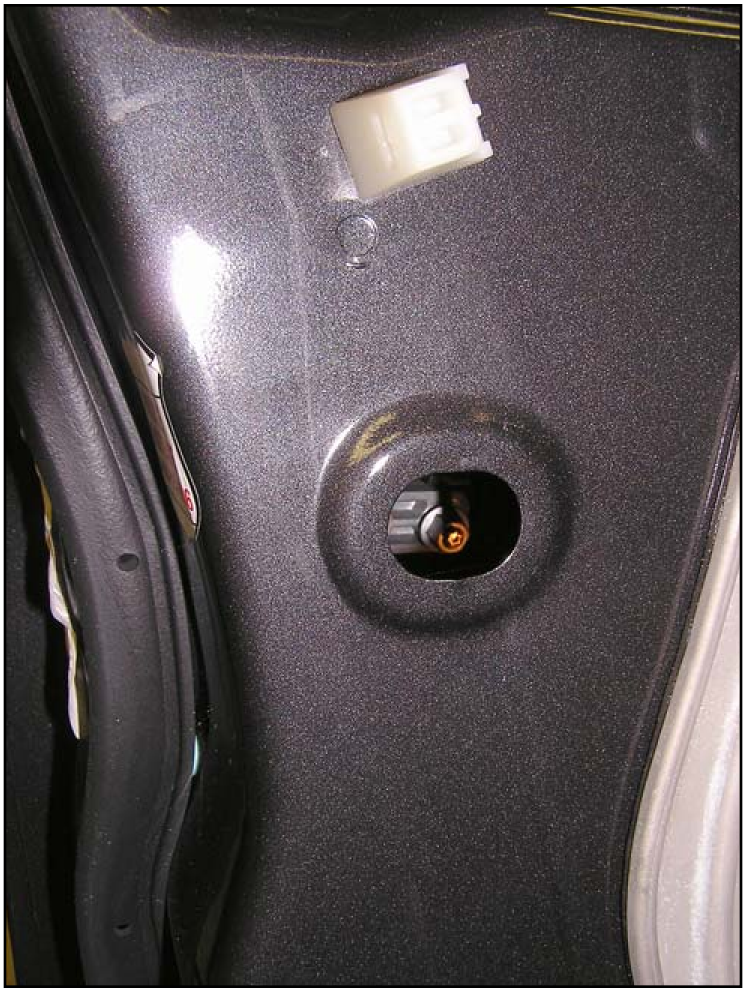


9. Remove the front top corner trim piece from the door body. It is retained by four flat friction catches. Pry out at the top of the trim piece to free the two catches that engage the door metal. Then, lift gently on the trim piece, to free two friction catches that engage the door body through the main trim panel. The trim piece will be tethered by the mirror regulator cable harness. The electrical connector is retained by a squeeze type connector lock. Squeeze the plastic lock tab and carefully separate the electrical plug from the connector on the trim panel. This will free the trim panel from the door.





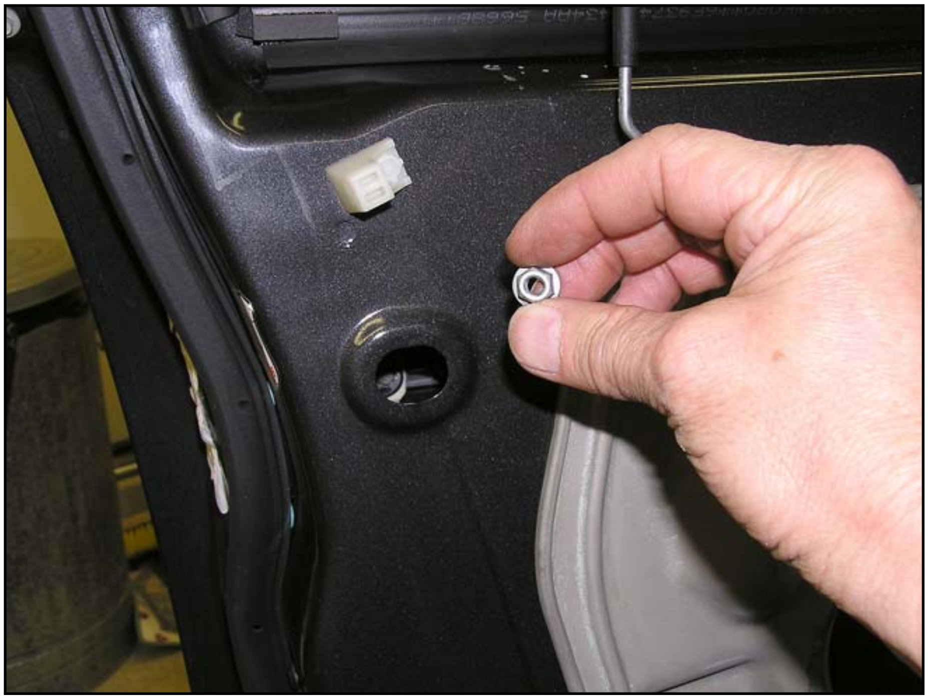
10. The main inside door trim panel is now attached to the metal door body by three plastic friction posts (A). The friction posts engage plastic sockets in the door body. They are easily released, by prying up on the trim panel. Unscrew the vertical lock button from the top of the lock linkage. Pull outward at the lower rear corner of the panel, to release the lower two posts. Hinge the panel away from the door, to release the third post (B), at the center top of the panel. You will note that there are two "cross pin locator posts" (C), located at the front and rear of the panel. They locate the panel over the metal door body, to properly position the panel for assembly. As you hinge the panel away from the door, the locators will come free of their metal sockets. Lift the panel off the vertical lock button rod to remove the panel. Further disassembly of the door is not necessary, to access the lock cylinder retaining screw.



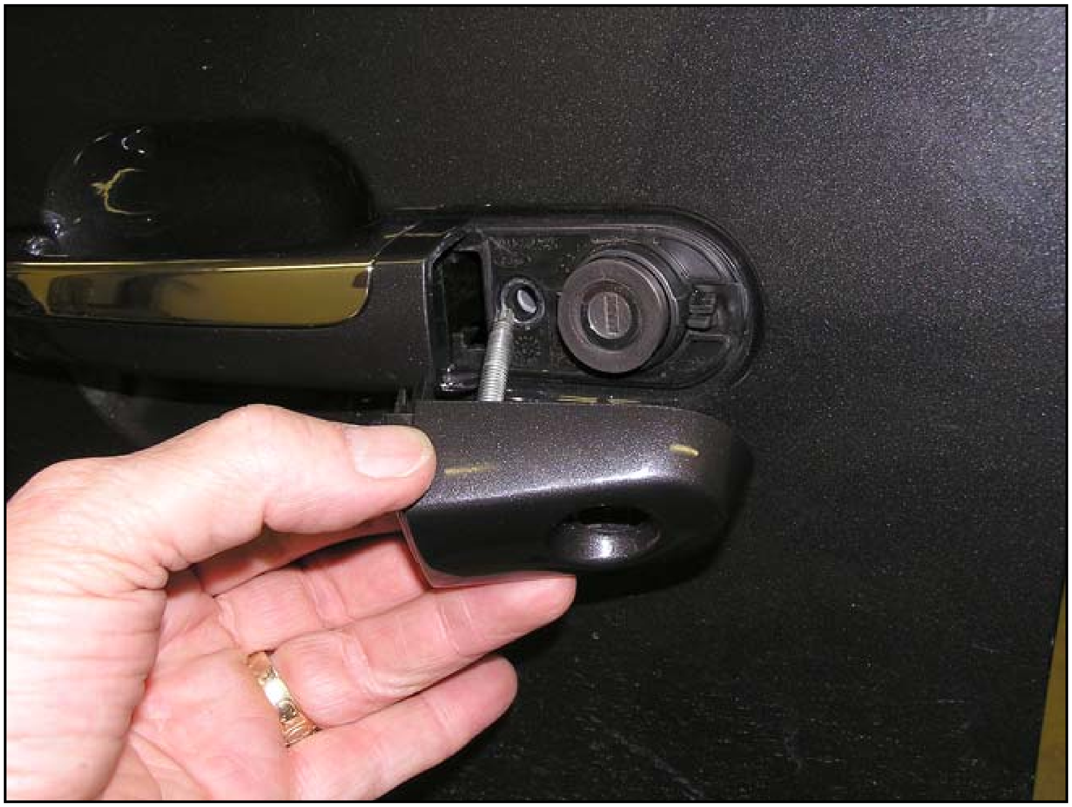
11. The lock cylinder and exterior cylinder trim piece are fastened to the exterior door panel by a single screw fastener. This photo shows the 10mm nut, over the stud screw, which attaches the two pieces to the door. Sadly, the view hole does not align with the stud, to allow you to use a nut driver or socket. Carefully peel back the heavy gauge clear plastic vapor shield from the oval access hole in the inside metal panel, below the vertical lock rod. You will want to stick it back in place when we're done, to restore the moisture barrier. The adhesive is like tape, and will seal back by pressing it in place.

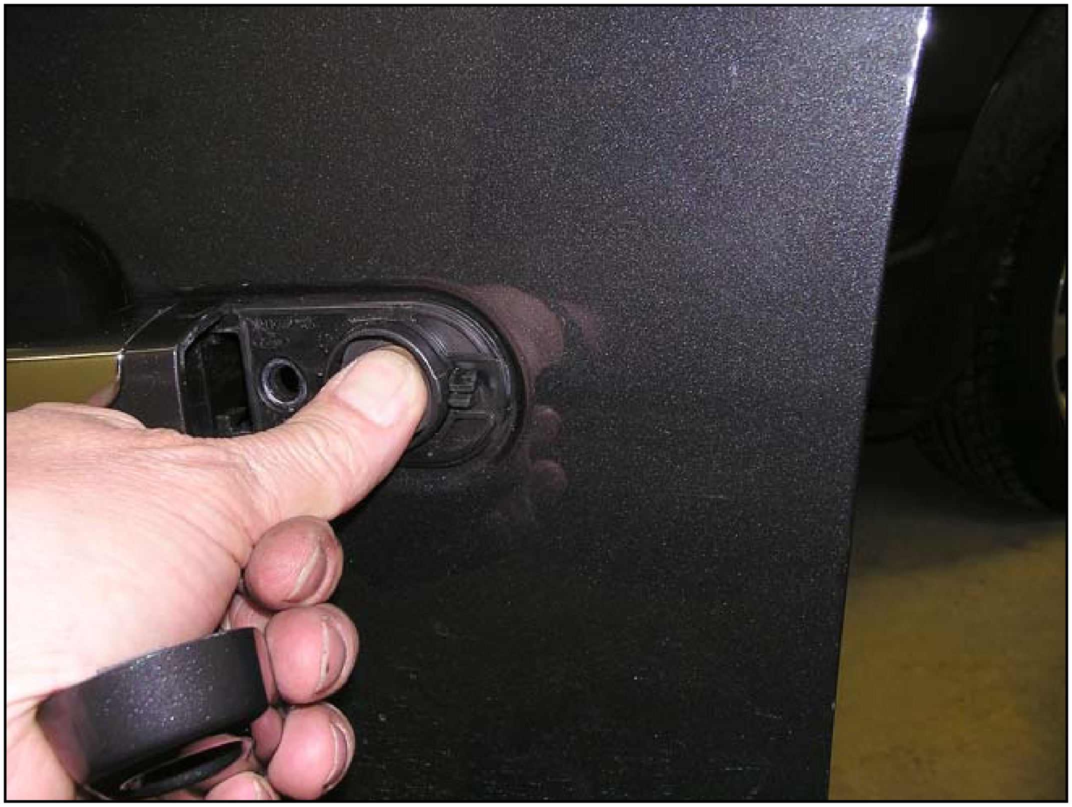
An "E" clip at the rear of the lock cylinder (not shown in the photo) retains the lock pawl and an electric switch. The switch cancels the alarm, when a key is used to open the door. Use a long small straight blade screwdriver to dislodge and remove the retaining clip. Place the screwdriver through the view port and put your other hand inside the door to catch the clip, as it is removed. Remove the lock pawl from the rear of the cylinder, and leave it attached to the linkage rod inside the door. Carefully slide the alarm switch off the rear of the cylinder, without rotating it. Allow the switch to hang from the wire harness inside the door. There is no need to remove the lock linkage or electrical switch from the door.

12. Use a 10 mm box end wrench to remove the attaching nut you see in photo 11. This is where a ratcheting box end wrench is handy. The stud screw is headed on this end, to accept a Torx socket, but there is not enough room in the access hole for more than one hand. As the nut is removed, the stud may unscrew from the rear of the outside trim. Watch for this and set the trim aside when the stud unscrews from the trim. Attach a pair of vise grips to the screw threads on the outside of the door to finish removing the 10 mm cylinder attachment nut. This is a "pinched" nut. The nut is deformed to accomplish a "shake proof" lock on the stud, without the need for a lock washer or Loctite.

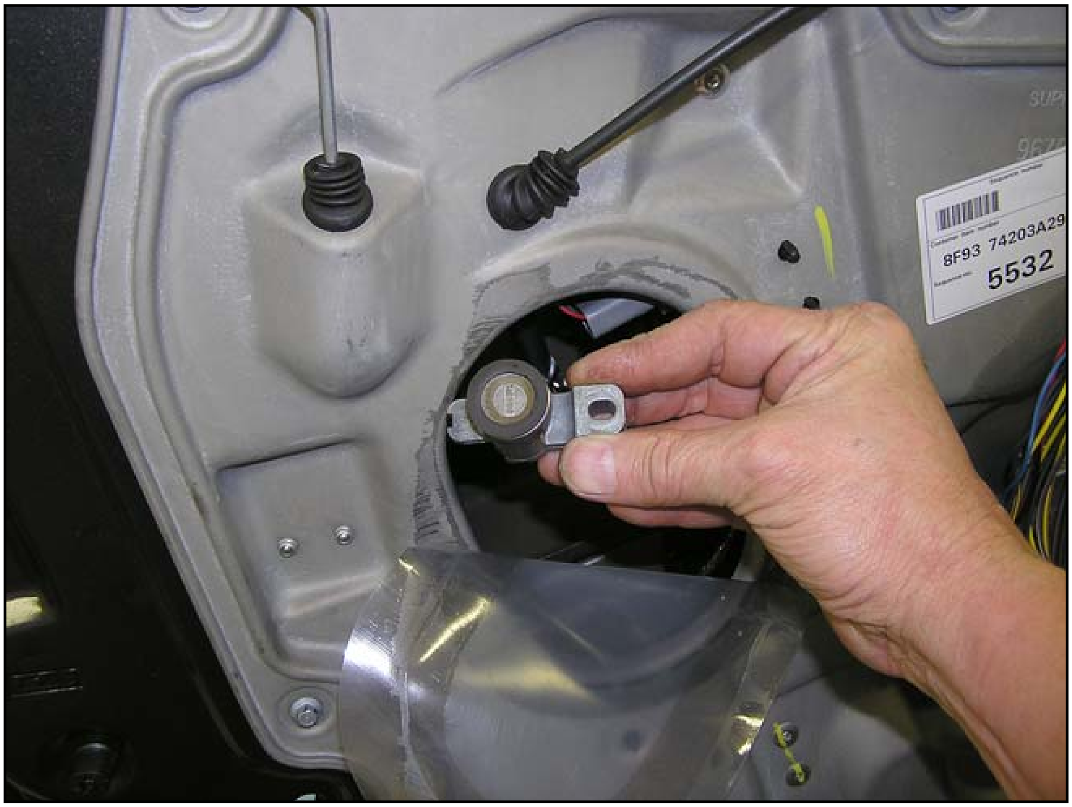


13. If the stud stays with the external trim piece, remove the trim and stud from the door. If the stud separated from the trim piece, replace and tighten the stud back into the trim piece with a Torx socket.



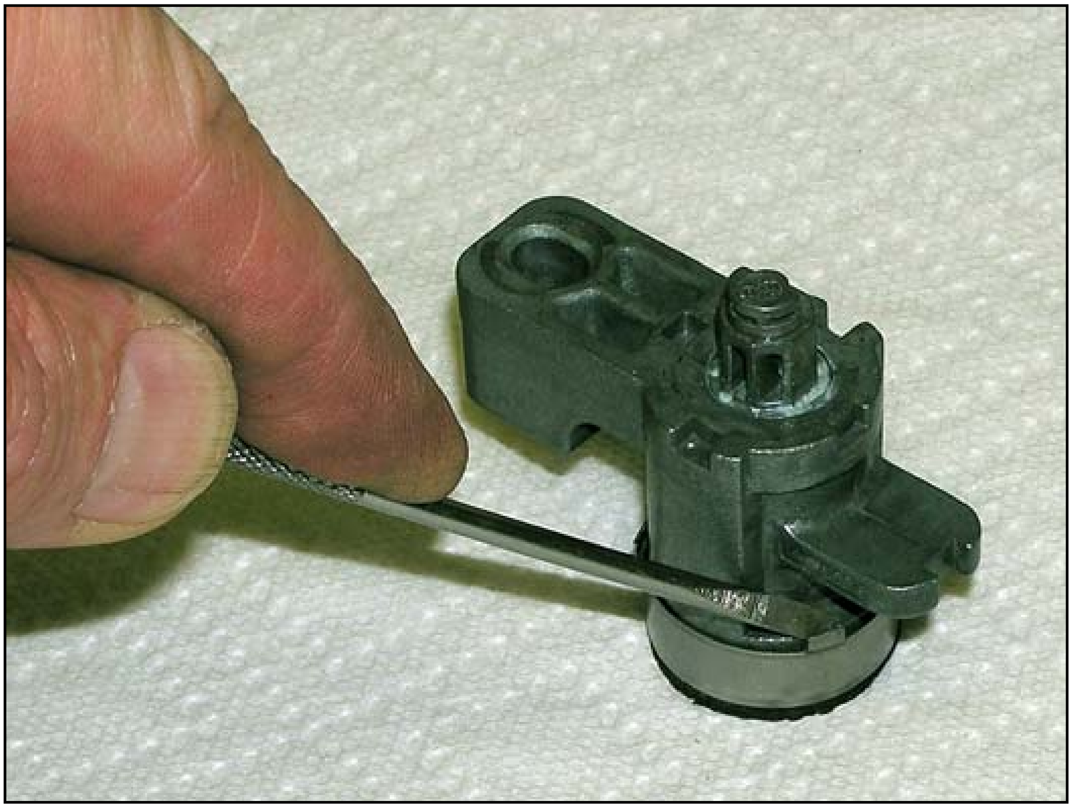


14. The door lock cylinder can be pushed through into the door cavity. Note that there is a rubber cap over the metal cylinder cap. It is a weather seal, so make sure it finds its' way back to the cylinder when you reassemble the door.

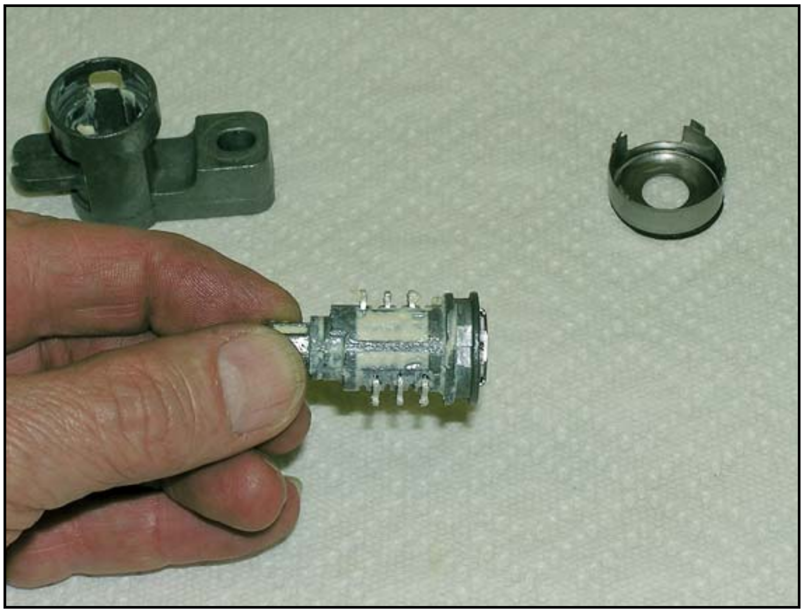


15. The cylinder is removed through the oval access hole in the inner door panel.

16. Disassembly of the door cylinder requires removal of the easy-off reusable chrome cylinder cap. The cap is secured by four tabs. Use a small straight blade screwdriver to carefully lift the retaining tabs, freeing the cap for disassembly. The cap is positioned on the cylinder, over a square boss. Observe the position of the cap for reassembly.



17. With the cylinder cap removed, the plug will slide easily from the lock case. It is not necessary to rotate the plug for removal, which was the case on some earlier ford door cylinders.



18. The Ford 8 wafer door cylinder used on the Taurus X and Freestyle (last year) has six wafer tumblers, arranged in a true double-sided configuration. There are three tumblers at the top of the cylinder keyway and three tumblers at the bottom. The first tumbler in the keyway is at the top of the keyway. Wafers in positions 2, 4, and 6 are viewed at the top of the keyway. Wafers 3, 5, and 7 will be found at the bottom of the keyway. This is a readable cylinder. The number four depth will be approximately even with the major ward in the keyway. The door cylinder uses cuts 2 thru 7.

If you are making a key for this auto, because of a lost key situation, read the door and make a key to prove the correctness of your reading. This key will open the door without offending the alarm. If you are using the InstaCode program, open the 0001-1706X code series and use the find bitting function to complete the key.

Rules for this key configuration are:

1. Tip cut is never a #1 depth (Depths 2–5 only, in position 8).

2. MACS is 2.

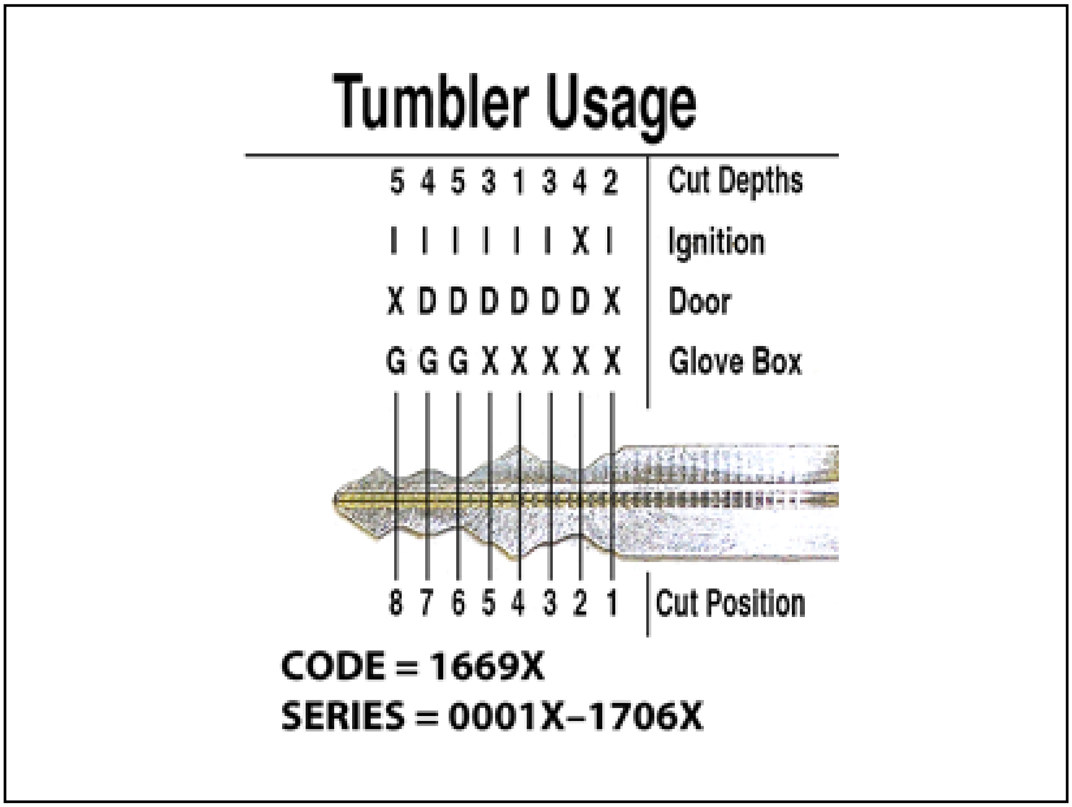
If you do not have the luxury of having the InstaCode program running on your truck, you may:

1. Read and make a working door key (for positions 2–7).

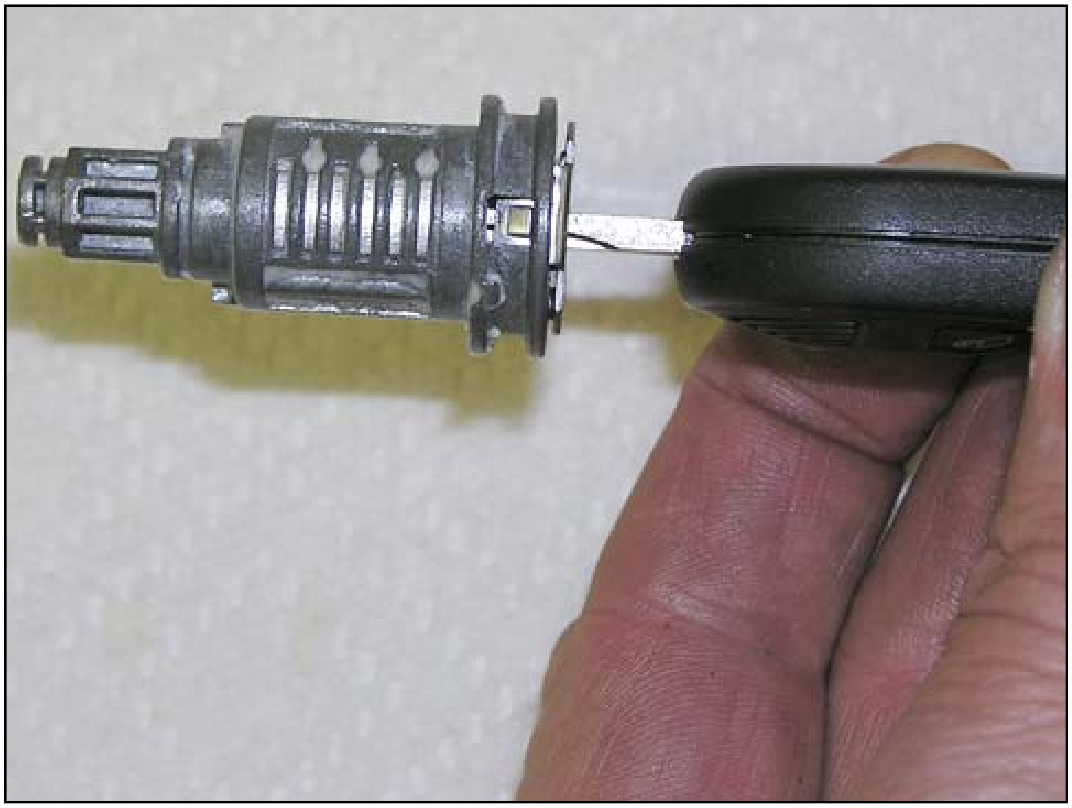
2. Read or progress the Door key in position 8, to operate the locking glove box.

3. Progress the Door/Glove Box key (pos. 2–8) in position 1 of the ignition.

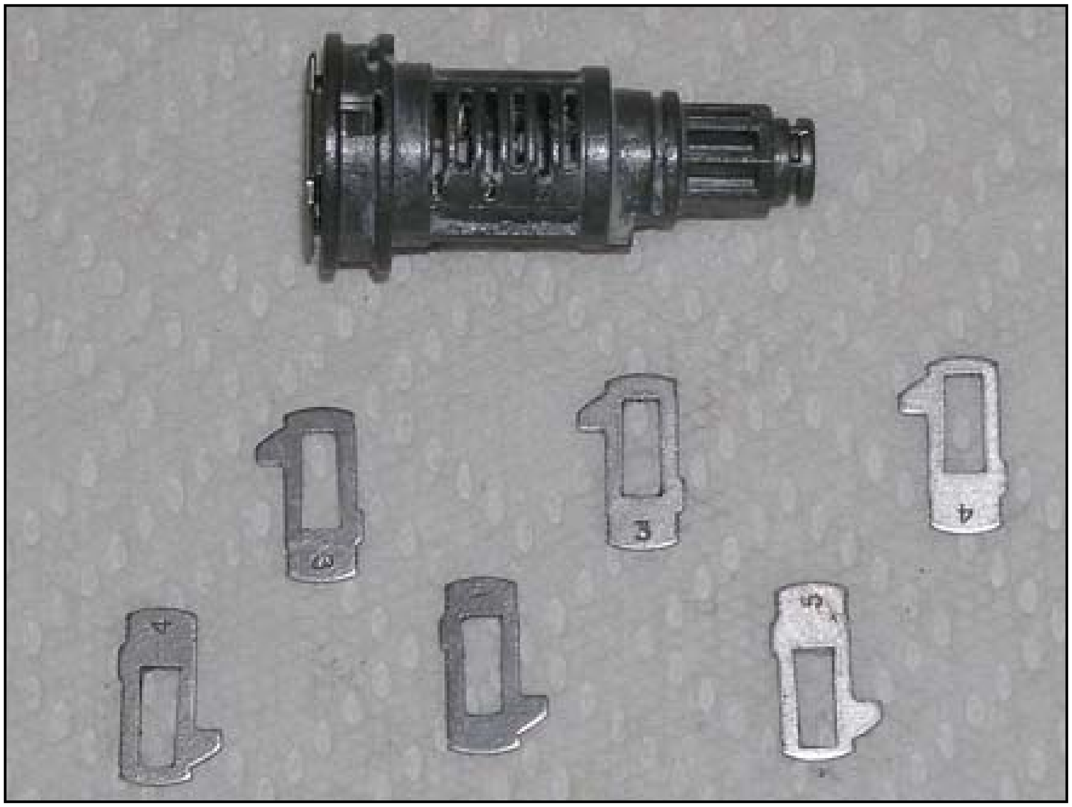
This will give you all the cuts of the key, without a code, impression or disassembly.



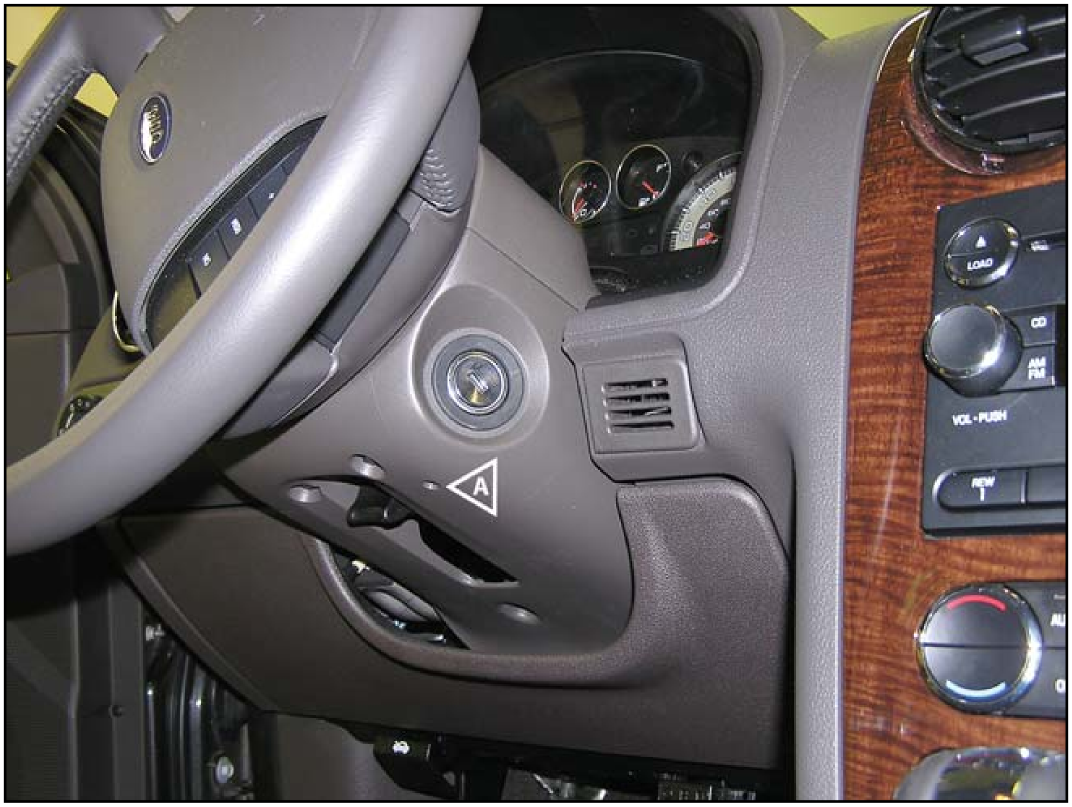
19. Tumbler usage for the Ford 8 wafer configuration found on the Taurus X is illustrated. The ignition cylinder utilizes cuts in all but position 2 (1 & 3–8). The door cylinder utilizes positions 2–7. The glove box cylinder utilizes positions 6–8.



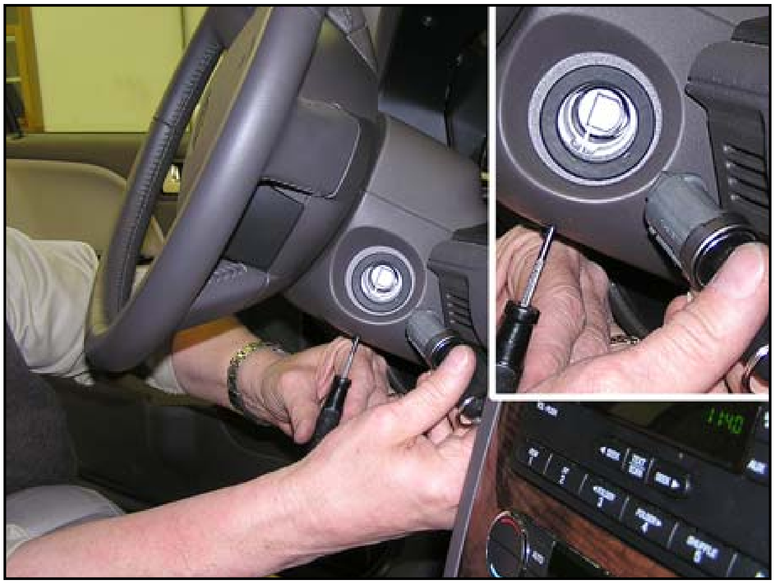
20. The spring dust shutter is retained in the head of the lock plug, by bossed barbs in the dust shutter disc. It is not necessary to remove the dust shutter to service this cylinder. This photo shows the bottom of the lock plug. Always liberally, coat the lock plug with white cylinder grease when reassembling. This will prevent malfunction caused by corrosion.



21. The wafer tumblers are numbered to identify the cut depth. Note that the numbering is stamped on the bitting portion of the wafer, but because of the tumbler arrangement in the lock plug the numbers will always face the rear of the keyway. To answer the obvious question; No, you cannot see the numbers in the keyway.



22. The ignition cylinder is column mounted. Tilt wheel is standard, on this vehicle in all trim levels. The ignition lock cylinder retainer is accessible by a hole (A) in the bottom of the plastic column shroud.

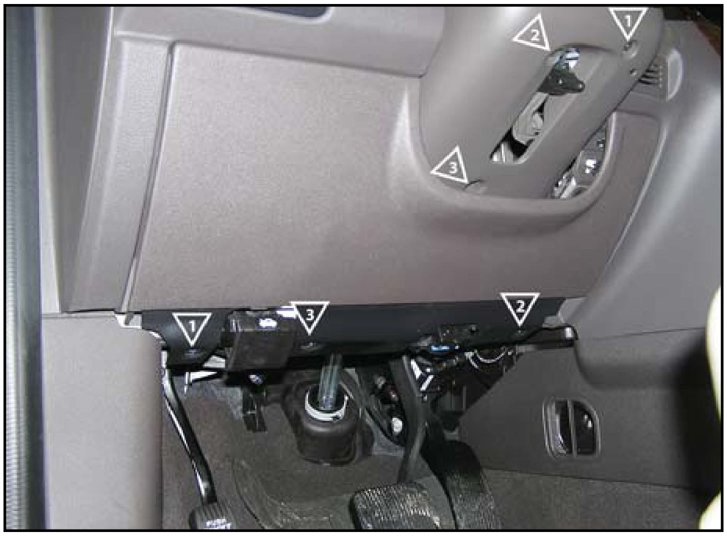


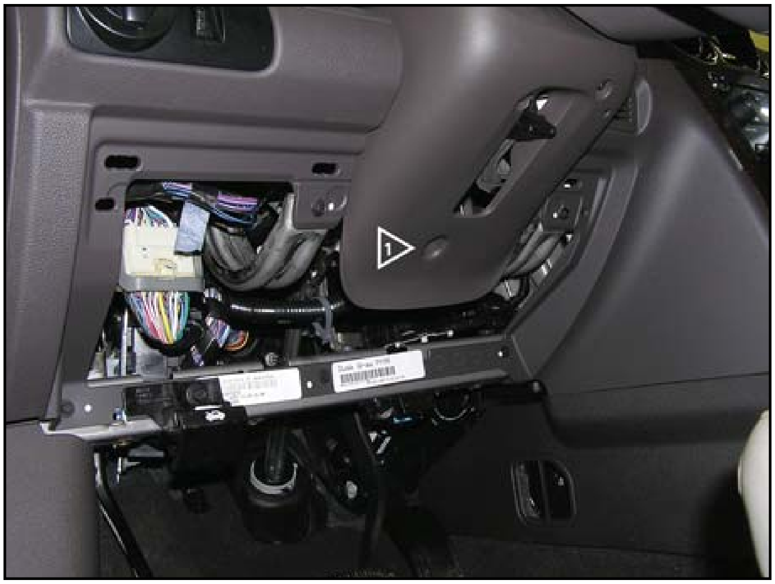
23. The ignition is easily removable in the on/run position, without removing the column trim pieces. Insert a working key, and rotate the ignition plug 90°, which should place the ignition in the ON/RUN position. A small flat blade screwdriver is the best tool to depress the plug retainer, as the retaining pin is tapered to the rear, for easier insertion. A pointed tool may not always satisfactorily depress the retaining pin.

Depress the retaining pin, with the ignition in the ON/RUN position, and use the key to pull the ignition forward, and out of the column.

24. If it becomes necessary to remove the steering column shroud, to service the ignition, remove three 7/32" hex head trim screws that secure the top and bottom halves of the column trim. You will find that the trim screw nearest the floorboard is not accessible while the lower dash trim panel is in place.

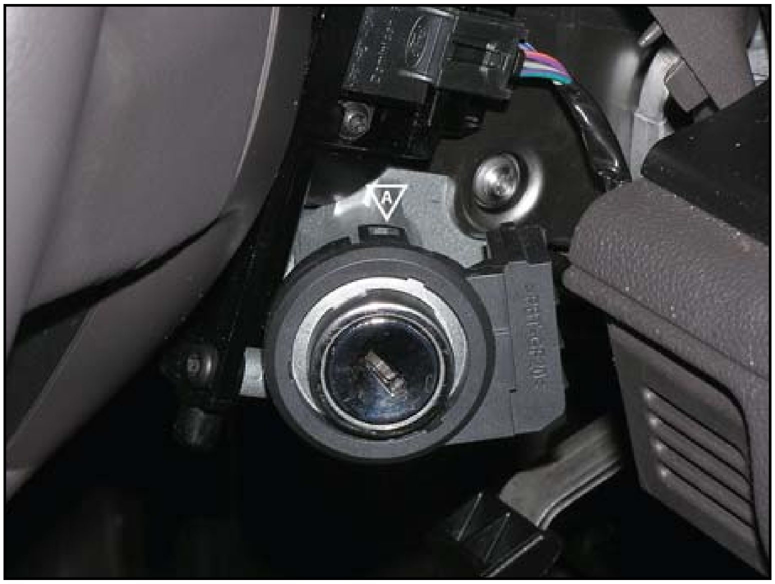
To remove the lower dash trim panel, find and remove three 9/32" hex head trim screws from the lower edge of the trim panel. The trim panel is secured by three screws at the bottom and three friction tabs at the top. When the screws are removed, carefully pull the panel straight forward, and away from the dash. Carefully separate the friction tabs from their dash receptacles. Observe that all three metal friction springs come away with the trim piece. Sometimes the metal portion of the fastener is left in the dash receptacle. Remove it carefully, with pliers and place it on the plastic tab of the trim piece.

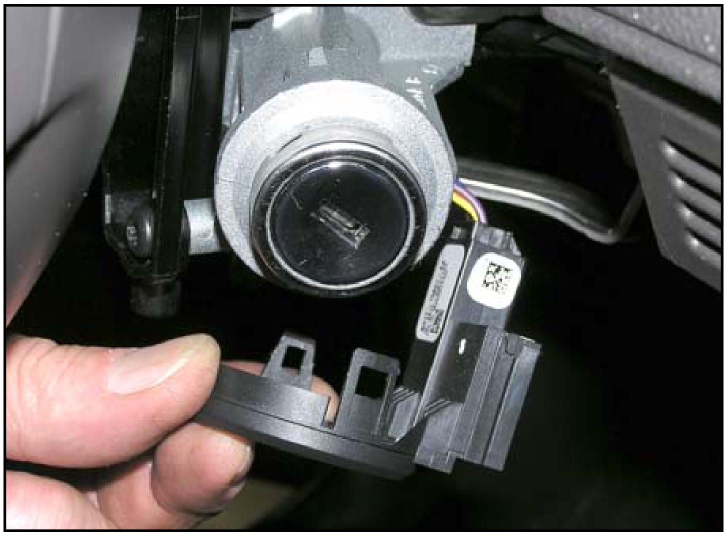




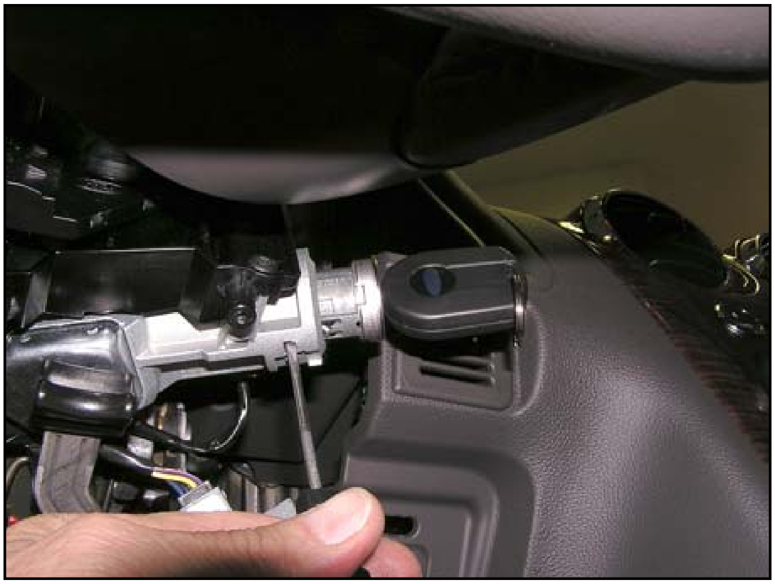
25. With the lower dash trim removed, access to the lower column trim screw is clear. Remove the final trim screw (A), unsnap and separate the column trim shell halves. Remove only the lower half of the column shell. The upper half of the shell has a rubber skirt, which passes up and under the instrument cluster. Pulling it out is easy. Putting it back may prove time consuming and unnecessary.

26. With the lower column trim shell removed, the transponder antenna ring is found encircling the ignition face. The earlier evolution of this Ford column, found in the Ford Focus vehicles, used either a Phillips or a Torx screw at the rear of the antenna ring, at a nearly inaccessible angle to secure the antenna ring in place. This antenna ring is retained by two spring stirrup catches. One catch is at the top (A), and a second will be found at the bottom of the ignition cylinder column housing. Gently lift the top catch, with a small flat blade screwdriver, while pulling forward on the antenna ring. While holding the ring forward (unlatched at the top), lift the lower stirrup latch.





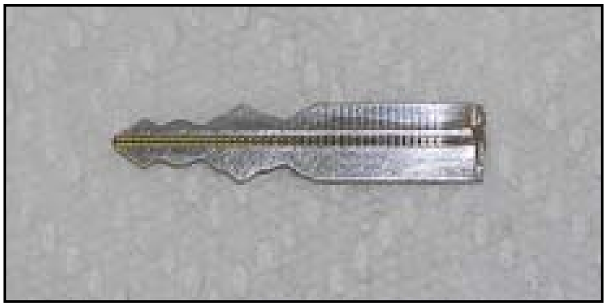
27. The antenna ring will slip off the column. It is not necessary to remove the antenna from the wire harness. Allow it hang down, or clip it under the top half of the column shell.



28. Though accessible with the antenna in place, it is safer to slip it out of the way, to avoid possibility of damage, should it be necessary to remove the ignition without turning the ignition cylinder to the ON/RUN position. In this case, the ignition is turned, and the retainer depressed to remove the ignition.

If the ignition is damaged, and cannot be turned, removal will require removal of the retaining pin. This ignition has a metal retaining pin (Earlier models using this style ignition had a plastic pin.). Use a carbide burr and rotary die grinder to remove the retaining pin without damaging the tilt column. A second option could be to punch the retainer with a pin punch, the size of the access hole. This will drive the retainer into the lock plug or deform the retainer enough to allow the ignition to be removed.

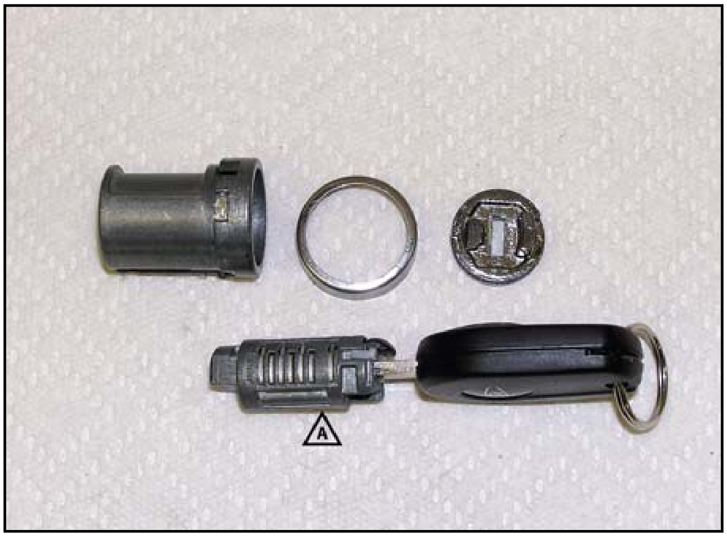
Earlier versions of this ignition employed a large heavy clip ring at the rear of the ignition cylinder. The clip ring retained the ignition, when in the OFF position. The clip ring also made it necessary to rotate the ignition to the ON/RUN position, in order to extract the ignition without damaging the column. The large clip ring is conspicuous in its absence. This ignition is common to the 2005-08 Freestyle, Mustang, Montego, Five Hundred, Expedition, Explorer, F series Pickup, and Mercury Mountaineer model Ford autos. Use the Strattec 708556 or 708616 ignitions to replace. The Freestyle, Mustang, Montego, and Five Hundred models do not use the tail clip.



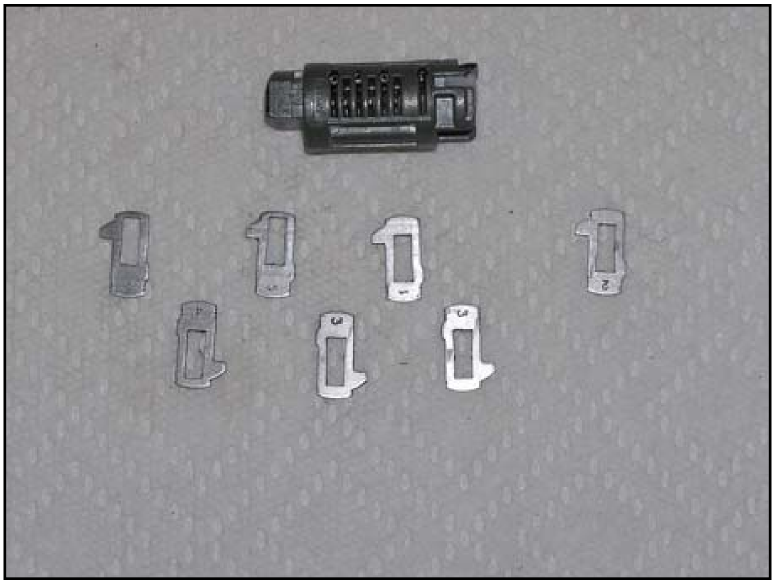
29. Disassembly of this ignition is accomplished by the use of a headless cut key or the Ford Ignition Service tool (Strattec P/N #381944). The Strattec plug loading fixture/tool is a handy device, but for the purpose of this article, we will use a headless cut key.

Cut by code or duplicate a Ford blank to the proper code over an H75 (JET H75 for the long milling) key blank. Cut the head of the key off, at the end of the key milling, as you see in Photo Number 29. The key shown was cut with an 8" bolt cutter, but you can saw it off just as easy.

Insert the headless cut key into the ignition cylinder and rotate the cylinder clockwise to the position that allows the plug to be pushed out the rear of the lock case. Follow the plug from the case by pushing on the end of the cut key through the cylinder face. The cylinder face will remain with the lock case, as the plug exits the rear of the case. The combinating wafers will be held in the plug by the presence of the cut key in the keyway.

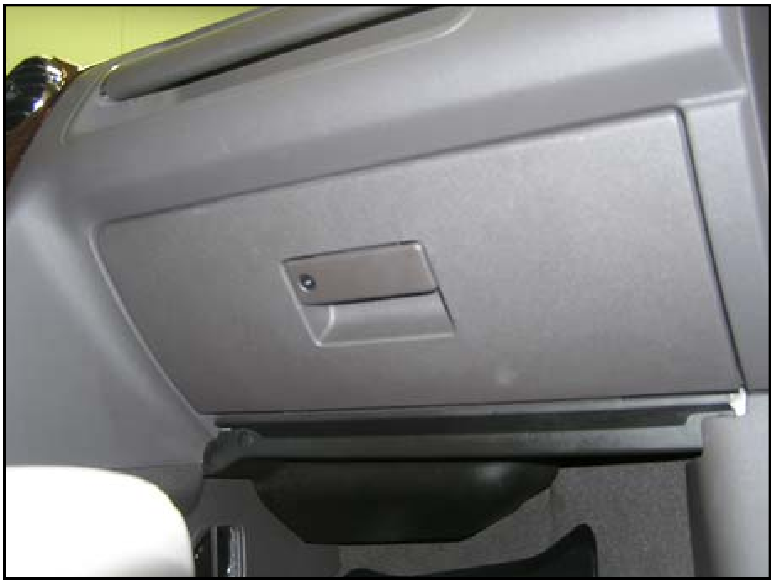


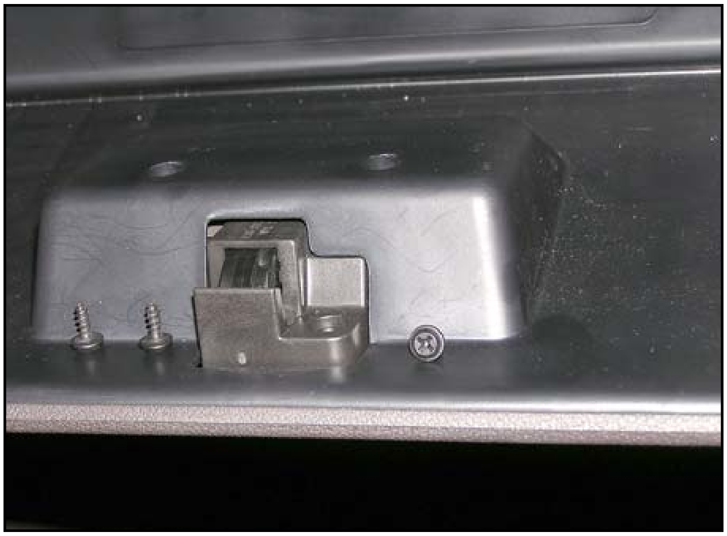
30. The ignition cylinder is shown disassembled. The components are: The cylinder case or shell, Bright trim ring, Bright cylinder face, and the Plug. The plug contains wafer tumblers in positions 1, 3, 4, 5, 6, 7, and 8. The position #2 wafer (at A) is not used in the ignition.



31. The combinating wafers are arranged in a true double-sided configuration. There will be four tumblers at the bottom of the keyway and three tumblers at the top of the keyway. This is not a sidebar ignition. The cut depth of the wafer tumbler is stamped on the bitting portion of the wafer, for identification during assembly. The arrangement of the wafers in the lock plug, place the number stamp toward the rear of the keyway. The numbers are not visible when looking down the keyway.

32. The glove box was found to have a lock cylinder. Vehicles surveyed all had locking glove boxes, but there is no guarantee that all Taurus X vehicles will be similarly equipped. The glove box cylinder is high enough from the floor and at an angle that permits easy reading. The cylinder has wafers in positions 6, 7, and 8.

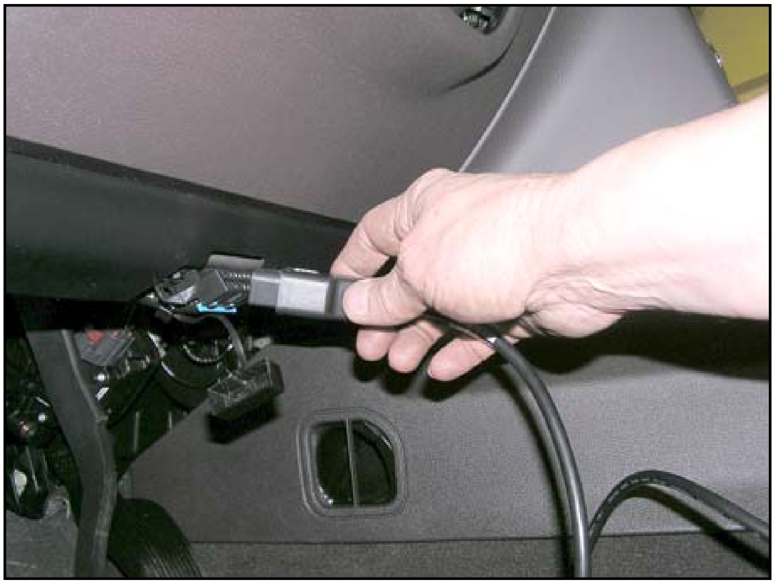


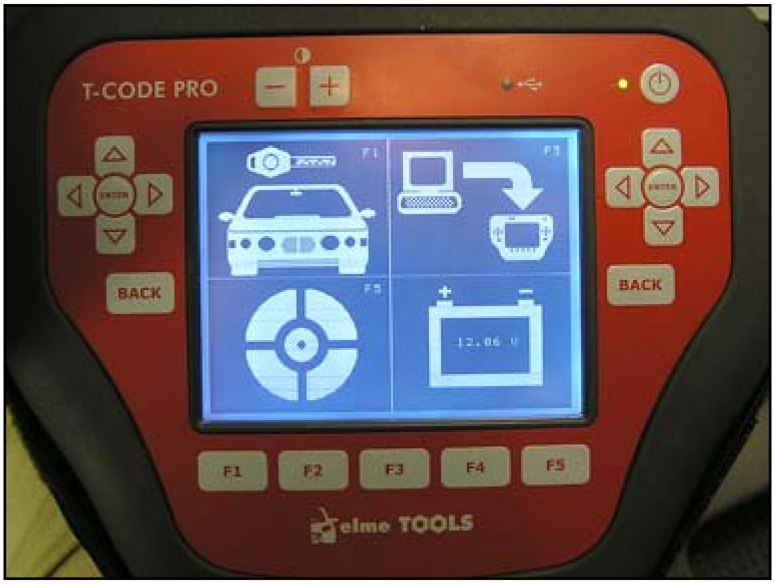


33. The glove box lock/latch assembly is secured by three Phillips head trim screws. Removal of the trim screws allowed the lock to be moved around but did not free it from the glove box lid assembly. Removal of the glove box lock assembly would require separation of the inside and outside glove box lid components. They did not separate easily, and fearing damage to the vehicle, we declined to further disassemble the lid.

34. The OBD II port is located below the dash, on the right side of the steering wheel. It will be covered by a soft rubber dust cap (A), which is tethered to the receptacle. Remove the dust cap to reveal the OBD II port.

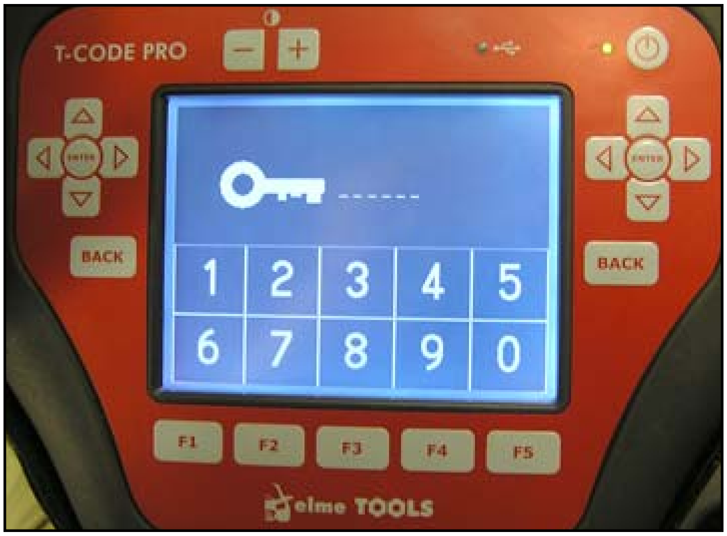
In this case, we are using the T-CODE PRO programming tool. Plug the tool into the OBD II port, under the dash.

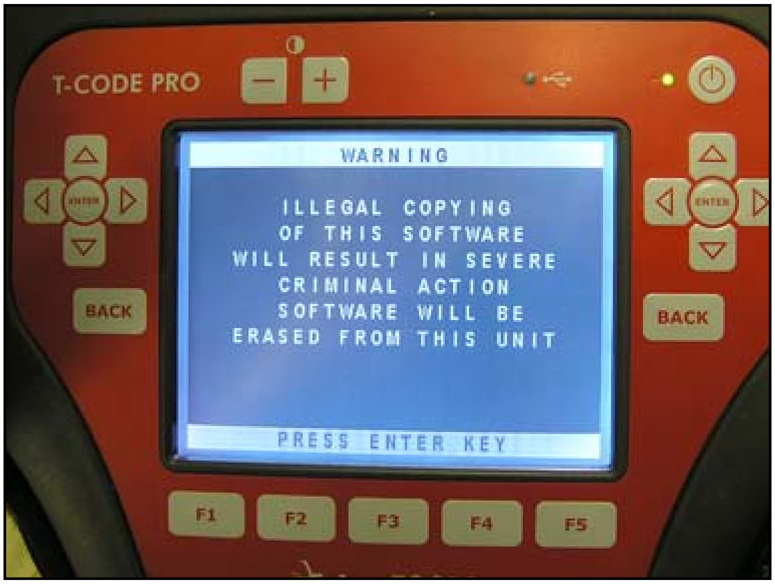




35. Press the power switch in the upper right corner of the programming tool to power up the device. The first screen displays information and options. The T-CODE PRO measures and displays the current battery voltage. It is 12.06 Volts, which is sufficient to commence programming. The Auto and Key icon (upper left quadrant) indicates vehicle selection as the first step toward defining the programming mode. This is a "touch screen," so we touch the icon to make our selection.

36. The second screen presents us with the security barrier. The user must enter his 6-digit security code to continue. An incorrect code will return us to this screen. Three unsuccessful attempts to enter the code, will result in complete erasure of the device memory, and necessitate that the device be returned to the manufacturer for reprogramming. As the final digit is entered, two options will be presented on the touch screen. Option "√" (check mark), indicates that your code is correct, proceed. Option "X" indicates that the displayed code is incorrect and you want to start again. Touch the "√" indicating that the code is correct, to proceed.



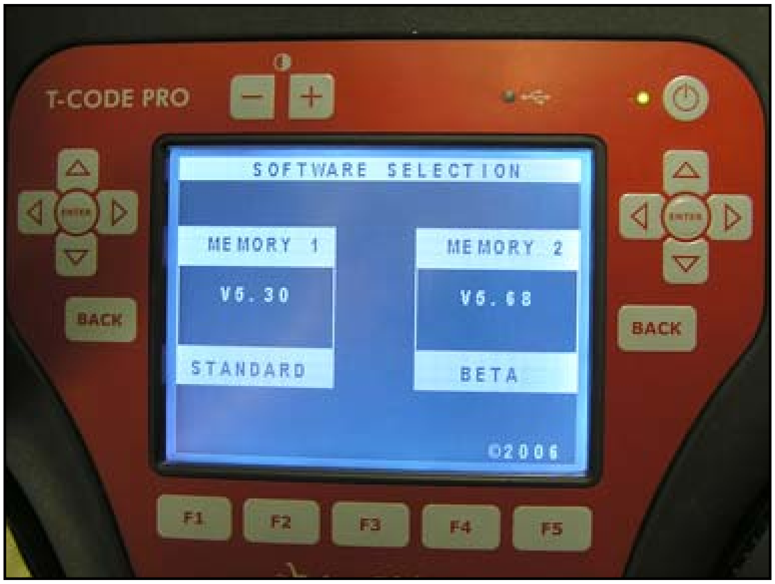

WARNING

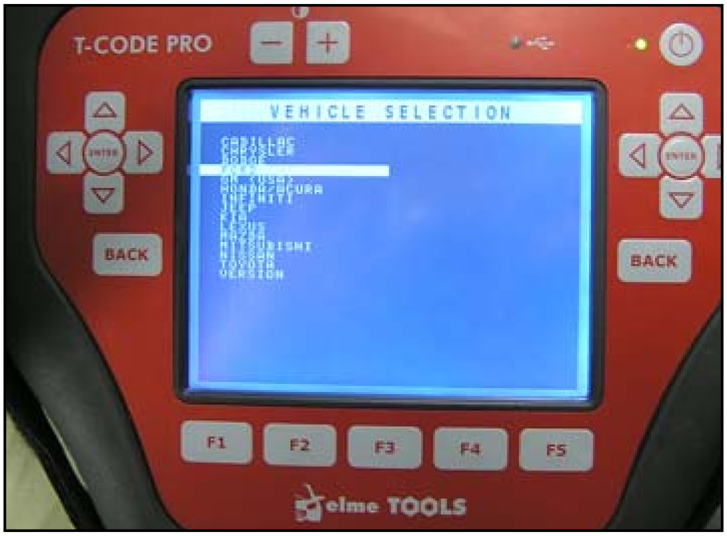
ILLEGAL COPYING OF THIS SOFTWARE WILL RESULT IN SEVERE CRIMINAL ACTION SOFTWARE WILL BE ERASED FROM THIS UNIT

PRESS ENTER KEY

37. The third screen is a security warning. Press enter to continue.

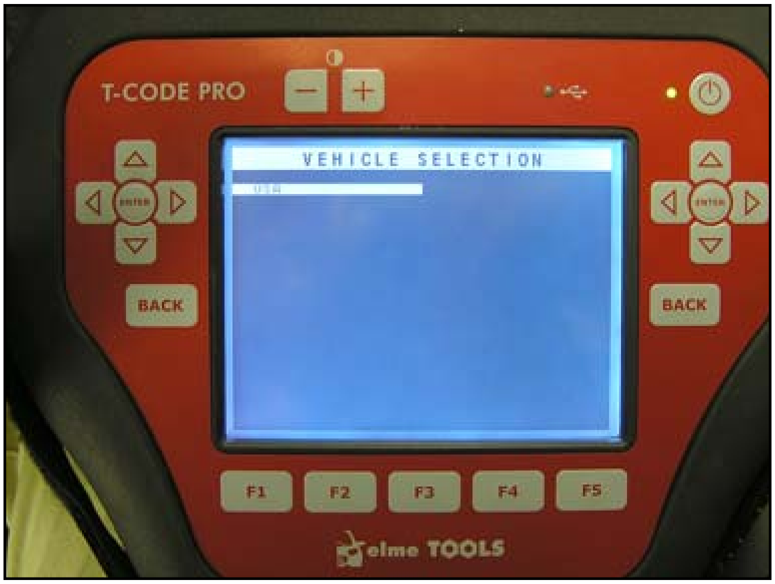
38. The next screen offers the options of Standard or Beta programming. Touch "memory 1, Standard," to continue.

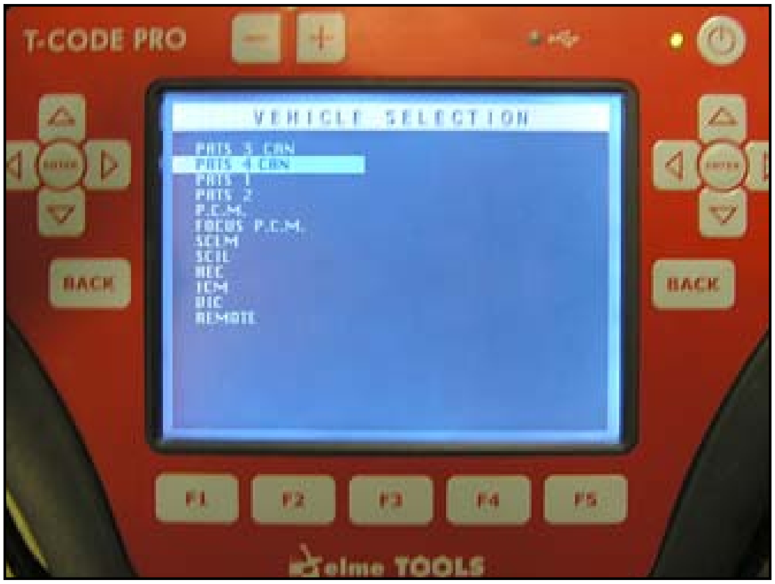




39. This screen offers a selection of auto manufacturers. The length of this list is dependant on the software you have loaded on your programming device. Use the UP/DOWN arrows to scroll down the list to illuminate "FORD." aThen press enter to continue.

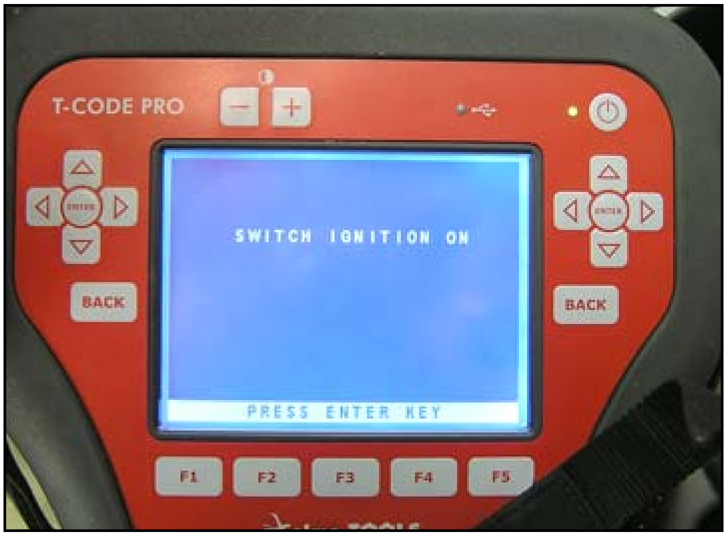
40. The next screen asks if you are working with a Ford USA, or if alternate software is present, Ford AUS for Australia, or Ford EURO. Since only USA software is loaded, we have only one possible selection, Ford USA. Press enter, to continue.

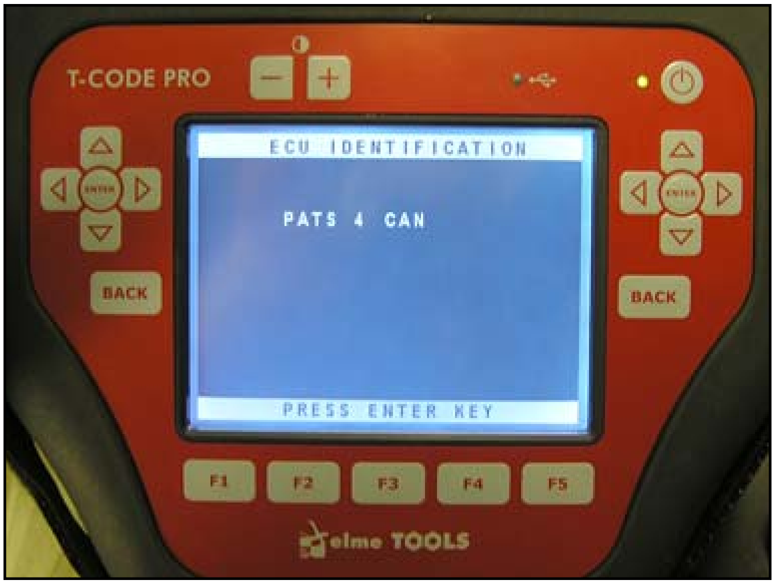




41. This offers us the selections of: PATS 3 CAN, PATS 4 CAN, PATS 1, PATS 2, PCM, FOCUS PCM, SCLM, SCIL, HEC, ICM, VIC, and REMOTE.
We are programming a transponder key to a vehicle that we have identified to use a Ford PATS 4 CAN. Use the UP/DOWN arrows to scroll down and illuminate/select PATS 4 CAN.
Press enter, to continue.

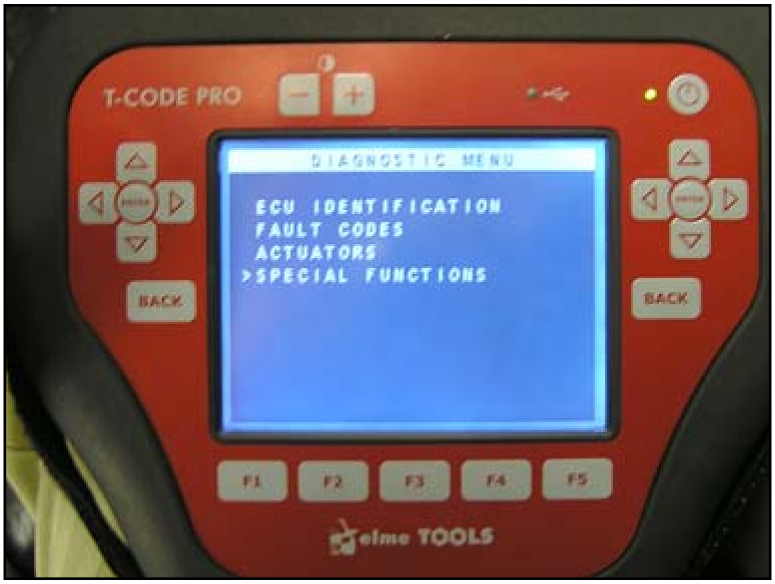
42. This screen instructs us to insert an unprogrammed transponder key, cut to the proper code, and rotate the key to the ON/RUN position. Do not crank the engine or try to start the engine. Press enter, to continue.

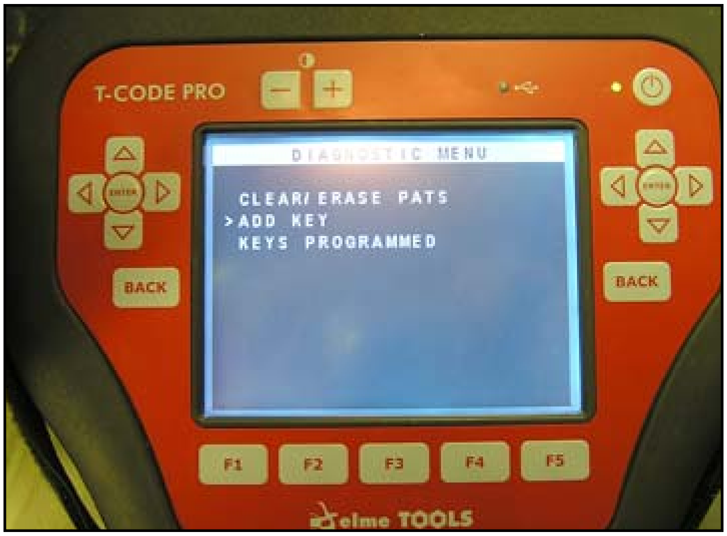




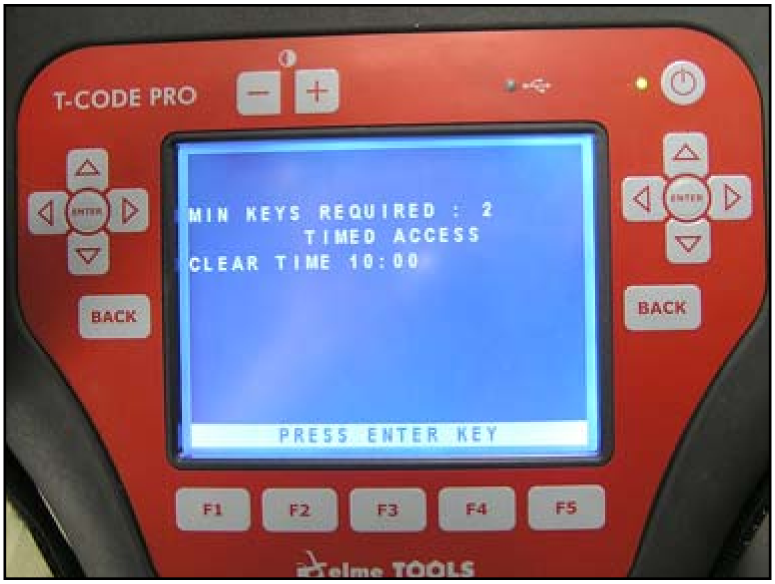
43. In this screen, the programming device has identified and confirmed our belief that the auto has been correctly identified to use the PATS 4 CAN system. Press enter, to continue.

44. This screen offers us a list of diagnostic/programming options. We want to simply add a key, without erasing any existing programmed keys. For this option, we will select "SPECIAL FUNCTIONS." Use the UP/DOWN arrows to scroll down the menu to select "SPECIAL FUNCTIONS." Press enter, to continue.





45. The next diagnostic/programming options dialog offers us the options of: CLEAR PATS, which will erase all programmed keys; KEYS PROGRAMMED, which will list all programmed keys; and ADD KEY, which will allow us to add a key without clearing/erasing any other keys. Use the UP/DOWN arrows to select "ADD KEY." Press enter, to continue.



MIN KEYS REQUIRED : 2
TIMED ACCESS
CLEAR TIME 10:00
PRESS ENTER KEY

46. This screen suggests that you will need two keys to program. This screen is shared with the erase all keys function, which indeed would require two keys. Adding a key, the way we are doing it, will only require one new key.

Press enter, to continue.

From the moment you press the enter button, you will wait ten minutes before the T-CODE PLUS can communicate with the security program of the vehicle. At the end of the ten-minute security wait, the screen will indicate: access granted, communicating. The auto will read the new transponder coding, and then store the coding in memory. If the process is successful, the screen will indicate, "programming Successful."

Leave the key in the ON/RUN position and disconnect the programming device. Wait at least ten seconds, before turning the key to the OFF position. This allows the processor to exit the programming mode. You will observe the security light in the dash to flash a coded sequence, as you wait. The last two sequences will be four flashes, pause, one flash, pause, five flashes, pause, one flash. Then, the security light will remain extinguished. (This observation is from experience, and may be different on other Taurus X vehicles. The coded flashes have significance, to be sure, but I do not have the key to their meaning.) When the security light remains extinguished, turn the key to the OFF position, then back to the START position. The vehicle should now start and run.

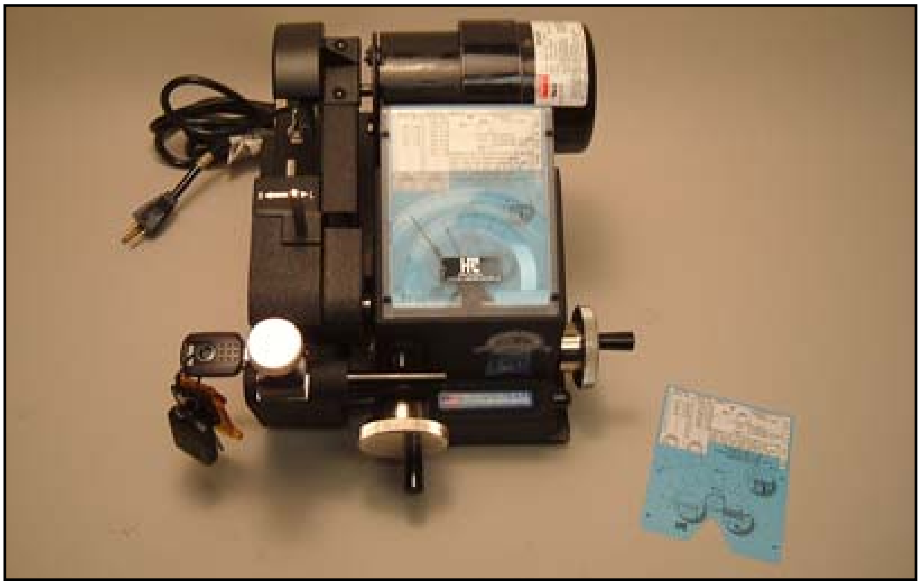
THE AUTOMOTIVE EDGE™

04.08

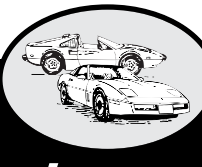
The Official Publication of the
NATIONAL LOCKSMITH AUTOMOBILE ASSOCIATION™

2008 Mercury Grand Marquis LS

1. The 2008 Mercury Grand Marquis LS full size car.



2. The HPC 1200CMB was used to cut keys.

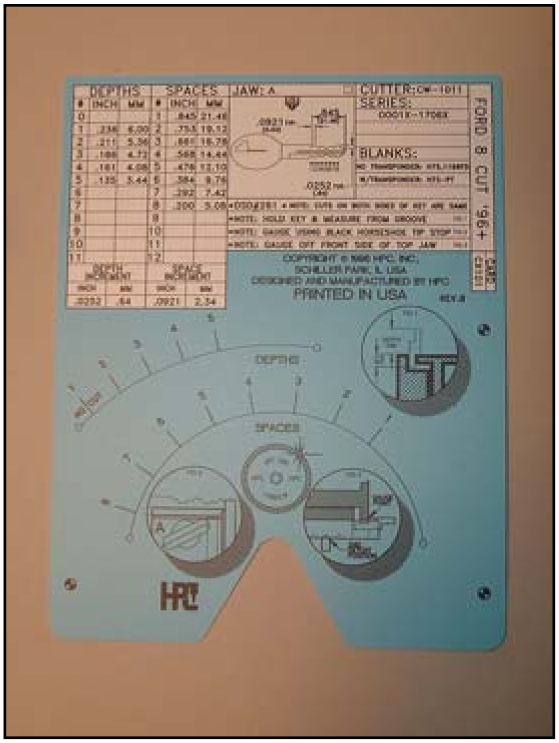


Issue
No.87

Here are the two best websites for Automotive Locksmiths:

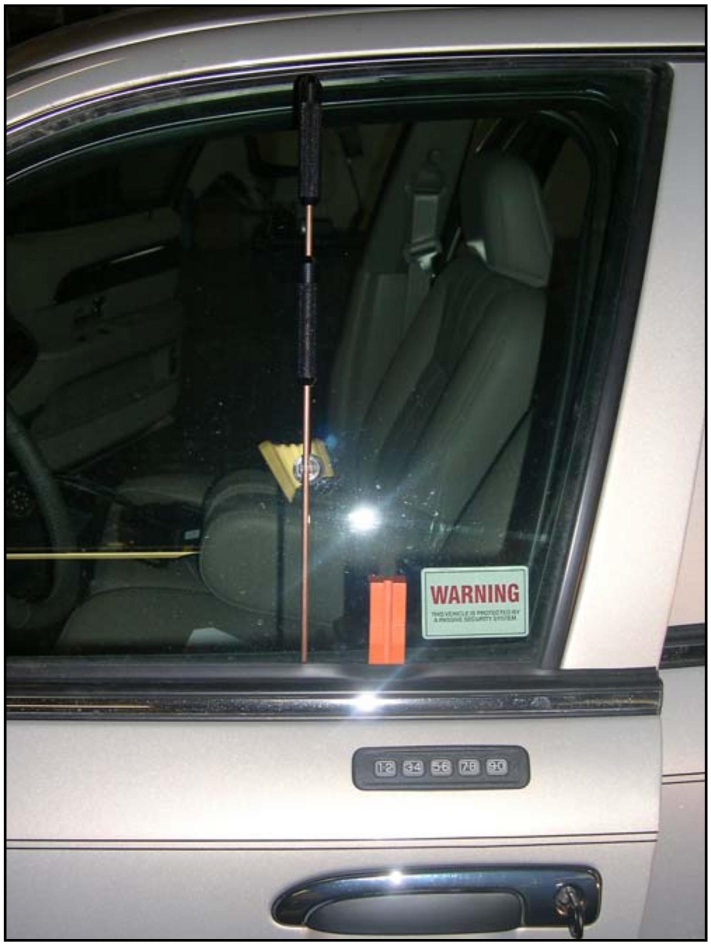
www.TheNationalLocksmith.com
Chat, Forums, Editorial,
Online Store, Tech Support

www.Laserkey.com
Product & Technology Sales,
Transponder Information Resources



3. The HPC 1200CMB Card No.CX101 was used for proper space and depth key cutting.

CAR OPENING



4. HPC Tools: Ultimate Auto Wedge No.CO-34, Vertical Clutch No.CO-76 Insert Auto Wedge No.CO-34 in between glass and weather striping in alignment with vertical button and linkage. Locate visible vertical button linkage 8–10 inches downward from top of button.

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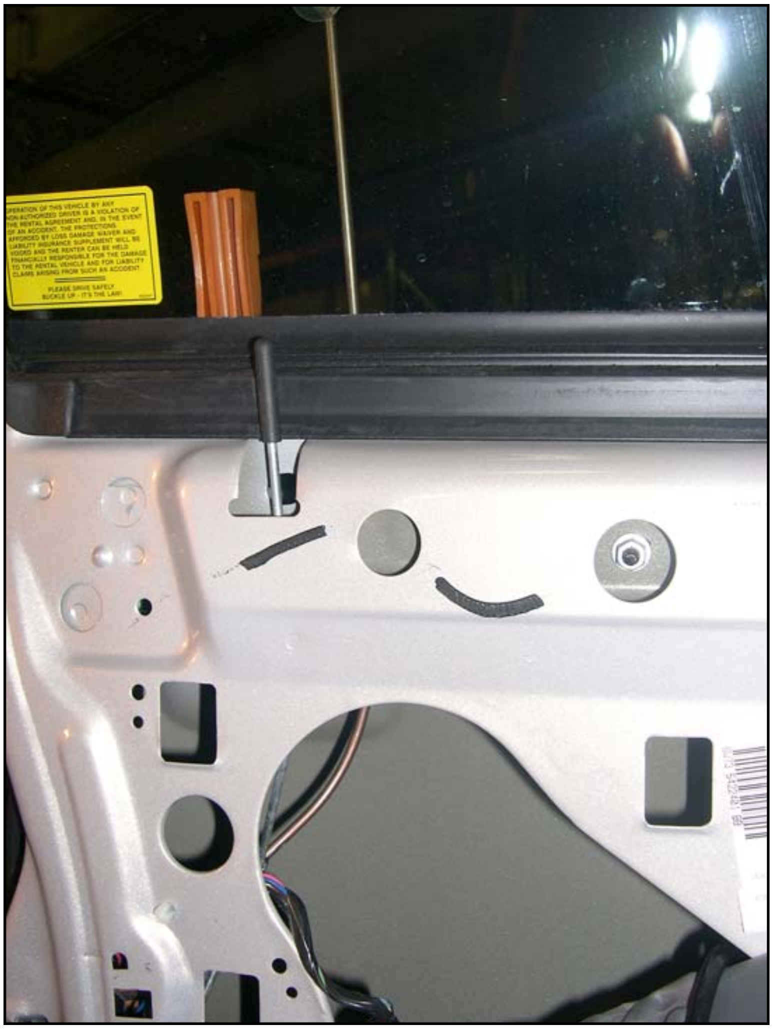
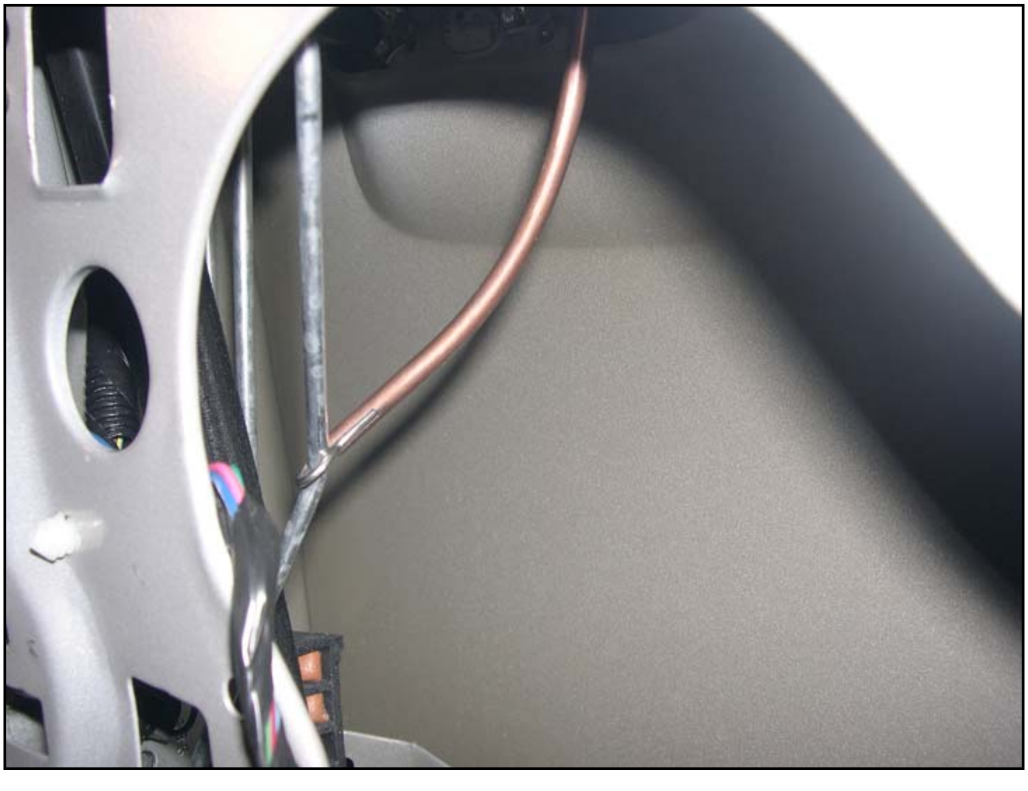
Issue No. 87

Manufacturers: Interested in offering rebates or discounts to NLAA members? Contact Marc Goldberg at the Home Office

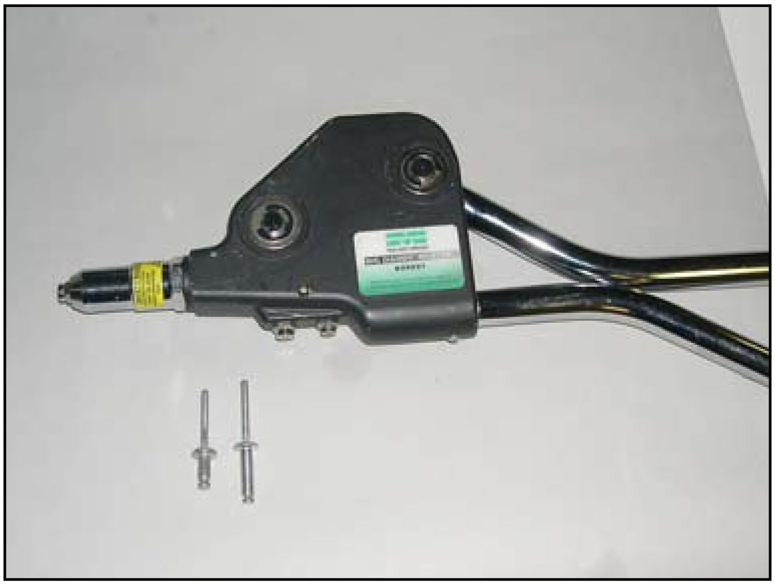


5. Insert Vertical Clutch No.CO-76, locate linkage, crab linkage and lift upward.



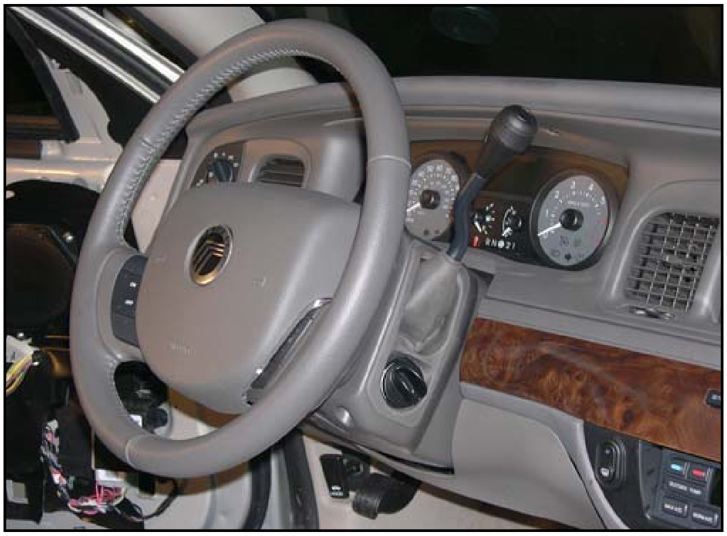
6. Inside view of Clutch tool at work.

SPECIALTY TOOLS / PARTS

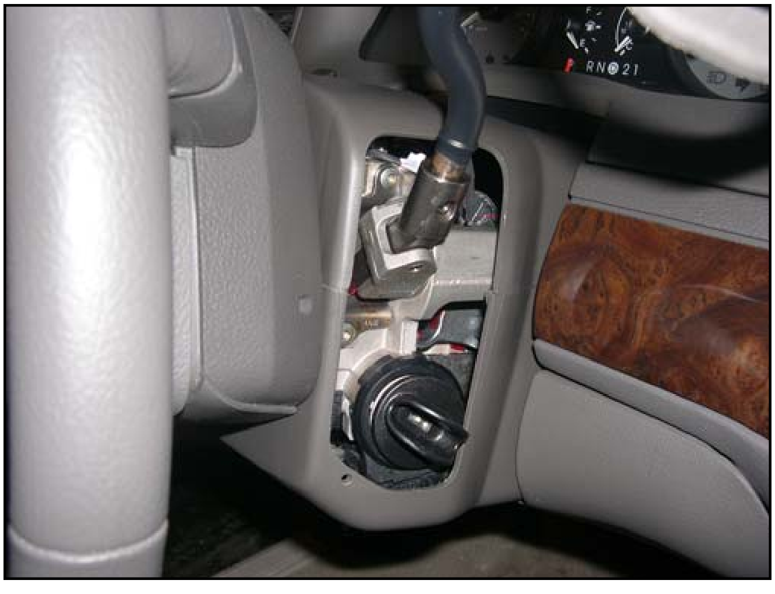


7. You will need vehicle manufacture specified rivets and rivet gun to service the door and trunk locks on this vehicle.

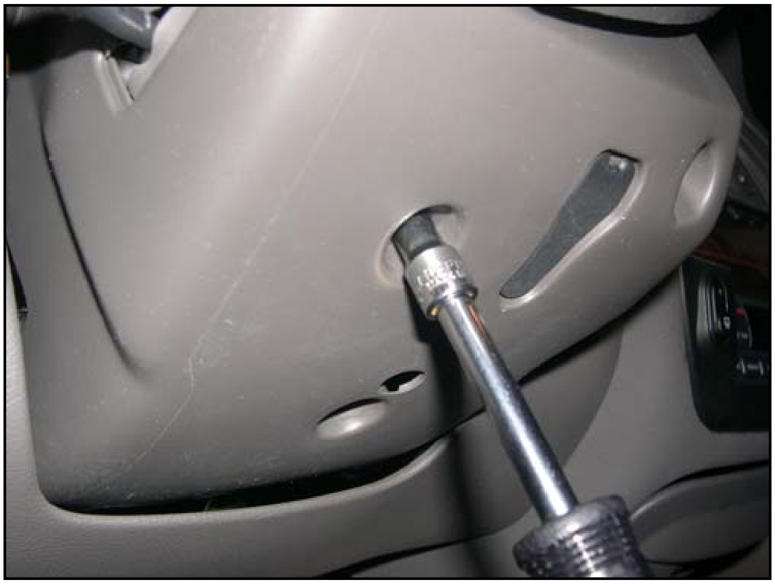
IGNITION LOCK REMOVAL



8. Ignition lock is on the steering column:

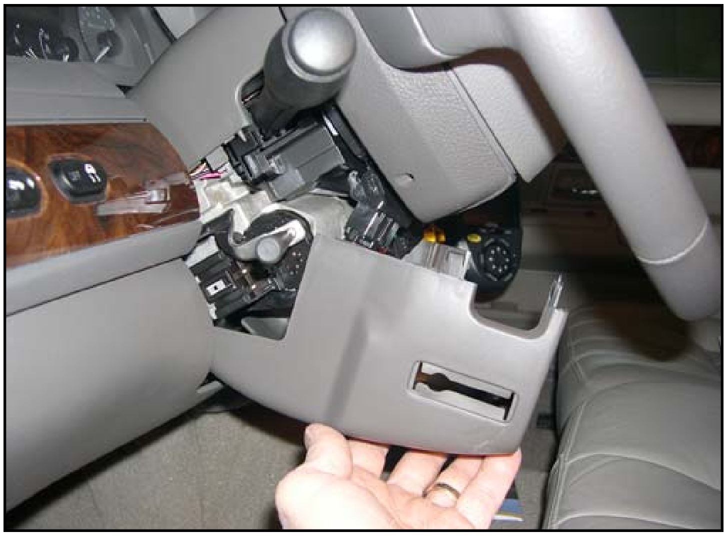


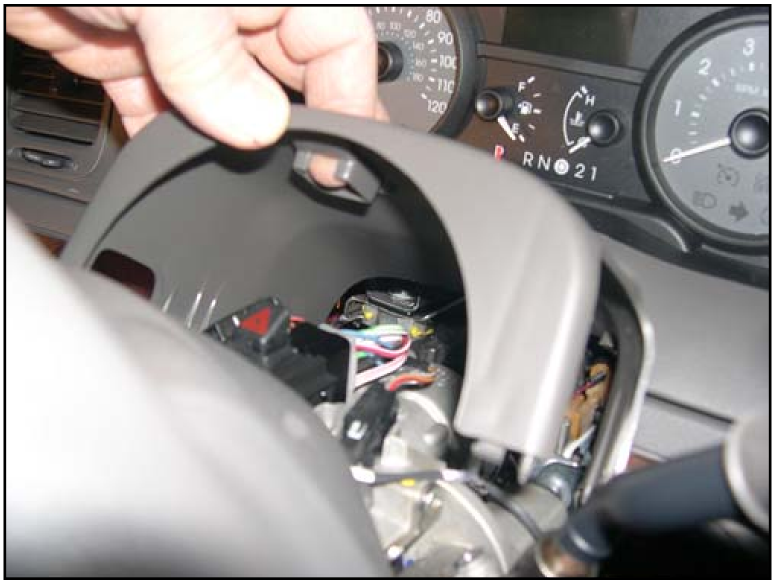
9. Remove rubber shifter/ignition lock shroud by pulling outward. Tilt steering wheel in highest position and remove tilt lever by unscrewing lever.



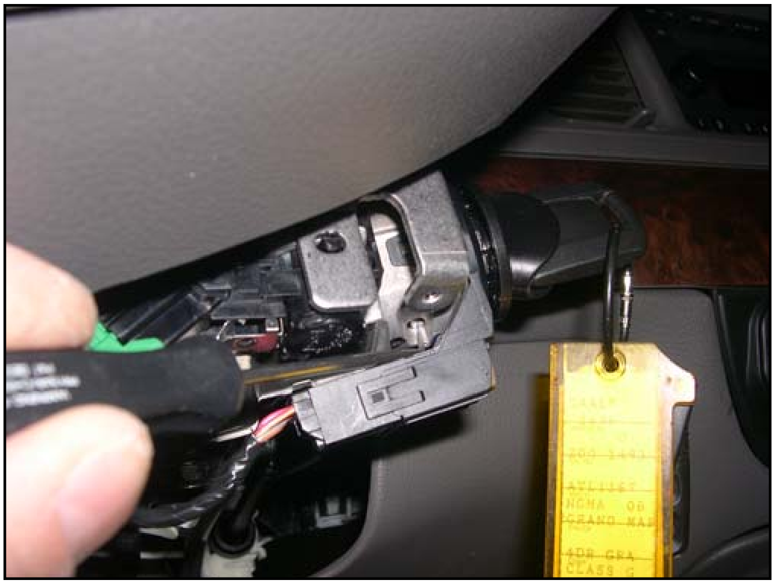
10. Remove three (5mm) screws from bottom portion on column shroud.

11. Remove bottom portion of column shroud.

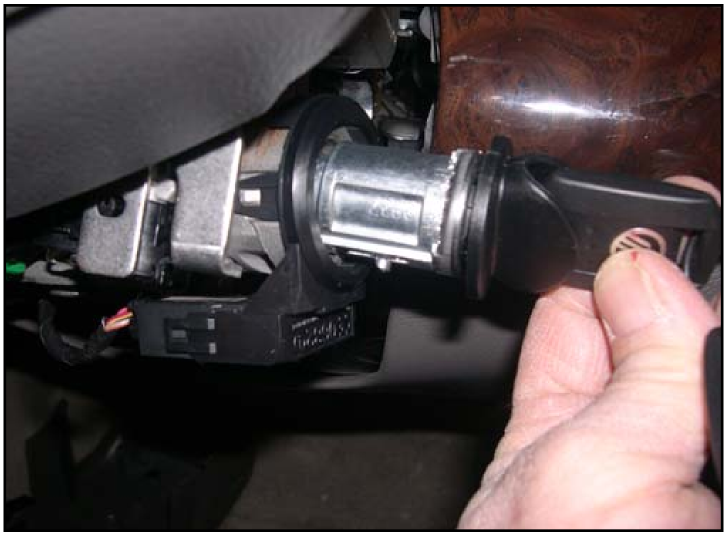




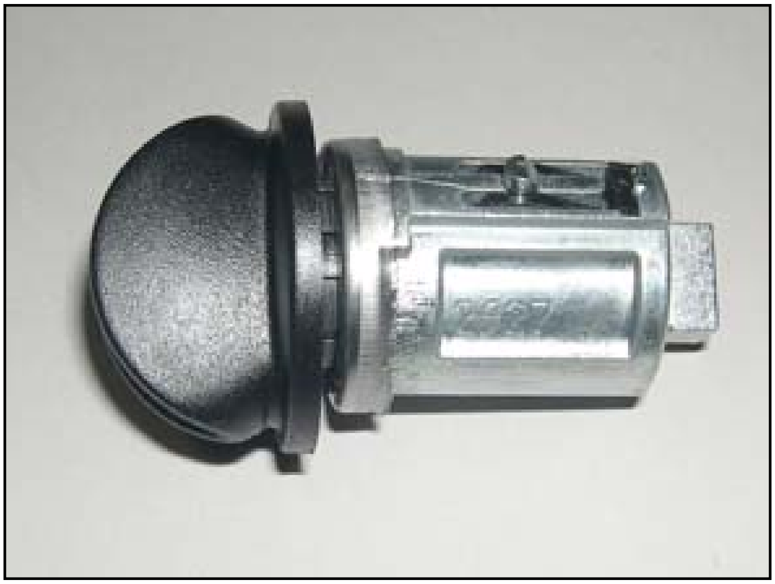
12. Remove top portion of column shroud.



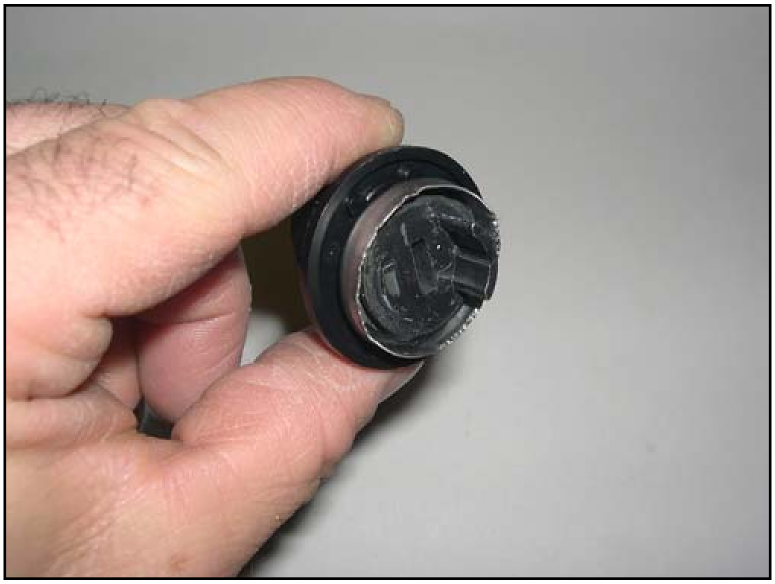
13. With lock in the on position, push on retainer pin at bottom of lock.



14. With the retainer pin depresses the ignition lock can be removed.

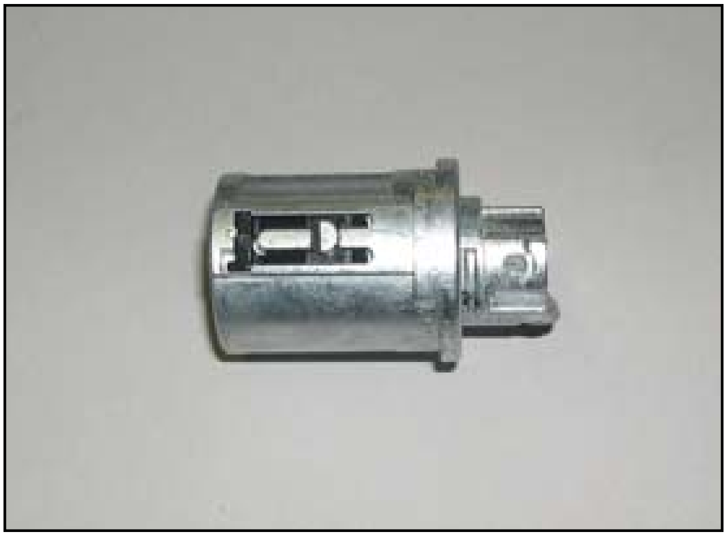


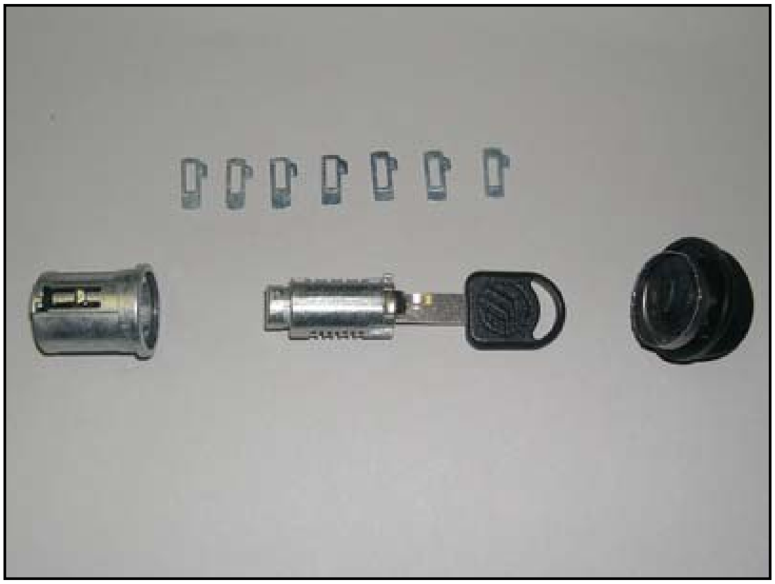
15. View of ignition lock.



16. Peel back on factory pressed on retainer cap points to remove cap.

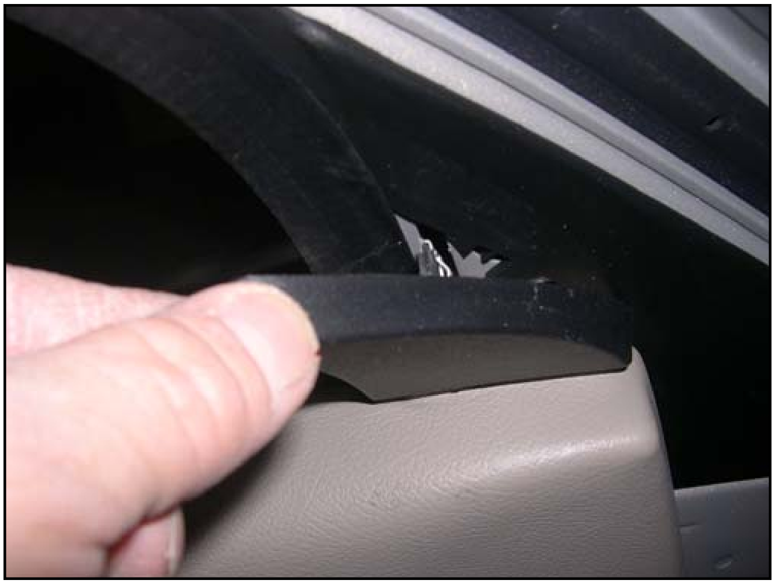
17. View of ignition lock core and housing.

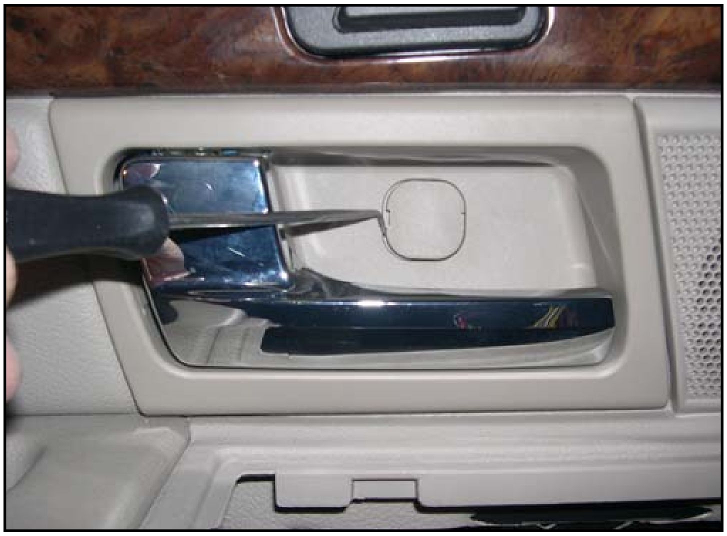




18. View of ignition lock parts.

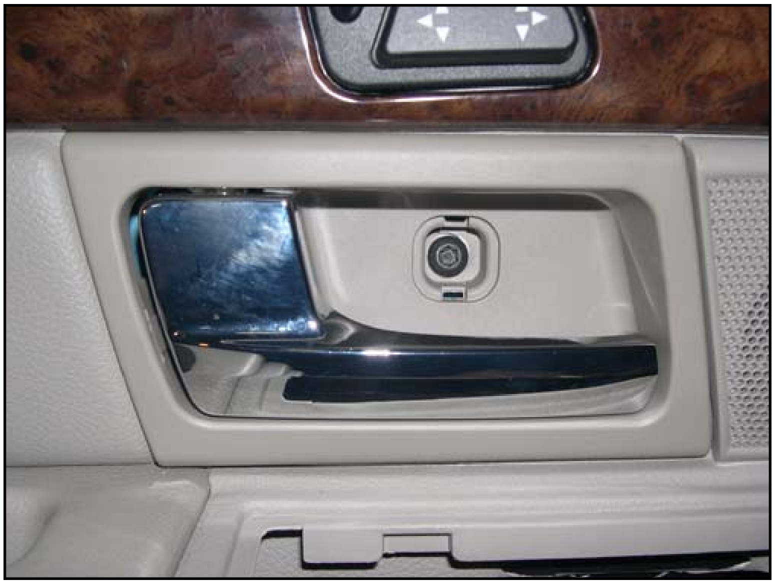
19. Remove inside upper panel (1 clips) opposite side of mirror using HPC No.AST-5 Clip Removal Tool.

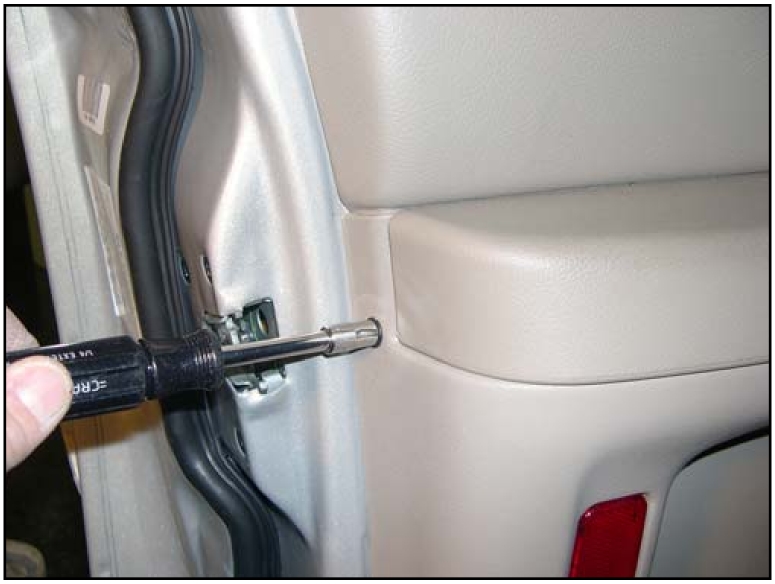




20. Remove screw cap to access one (T-25) screw at door latch release handle.

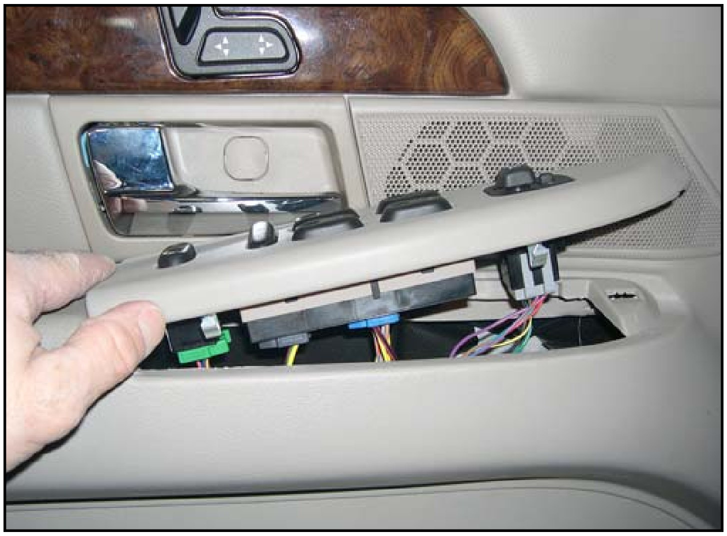
21. View of T-25 screw under screw cap.

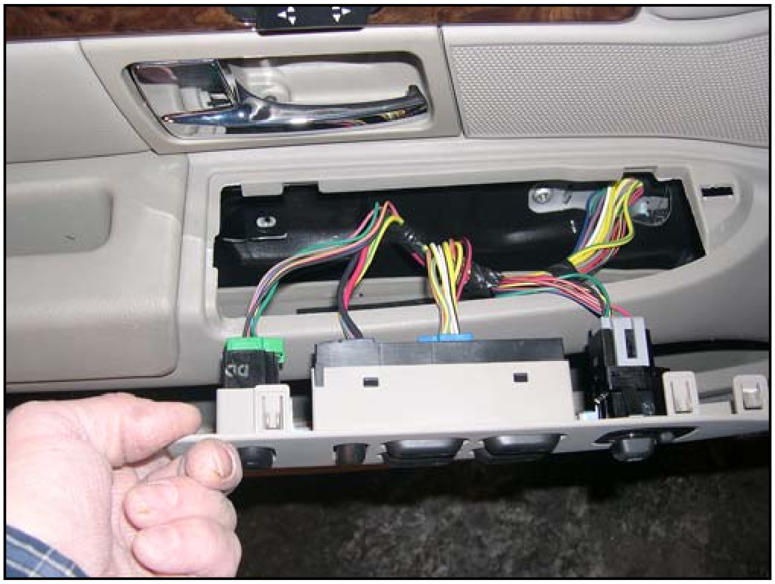




22. Remove three (7mm) screws on door panel.

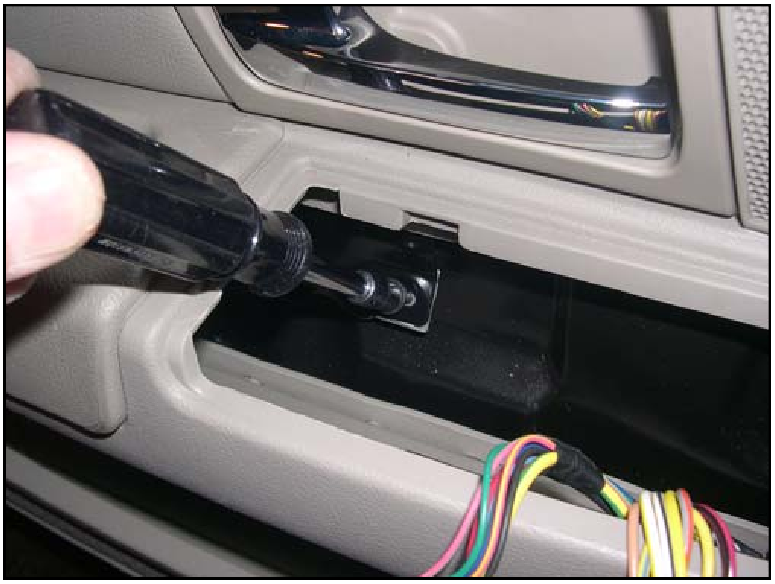
23. Pull upward on power lock and window assembly (1 clip) and disconnect power window and power door lock plug harnesses.

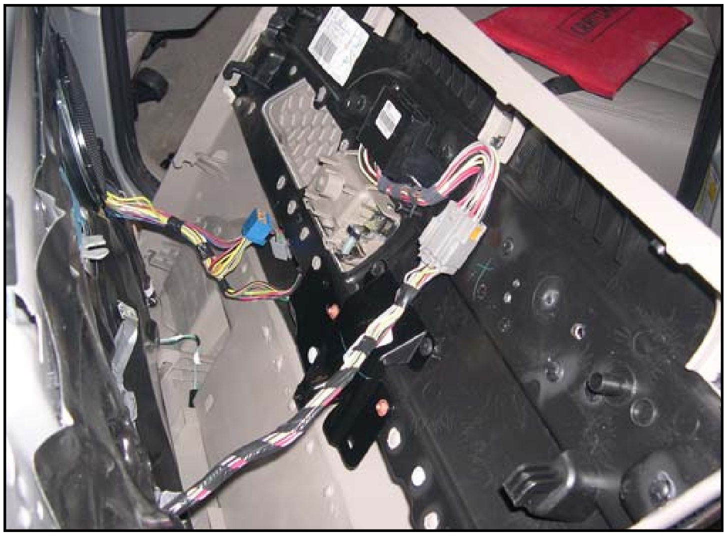




24. View of power door and window assembly.

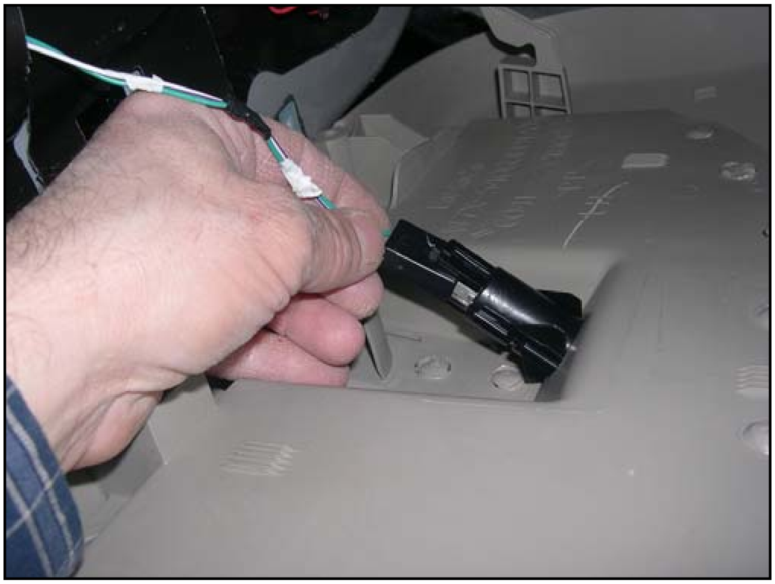
25. Remove ane (7mm) screw under power lock and window assembly.

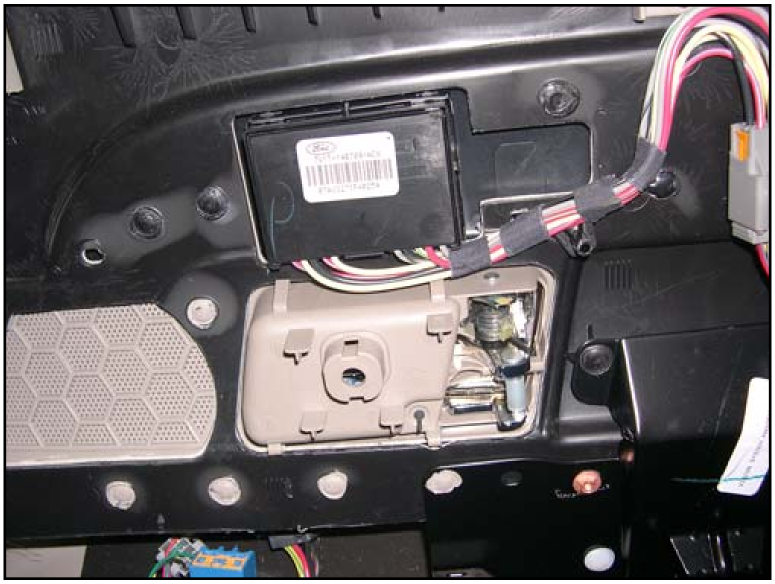




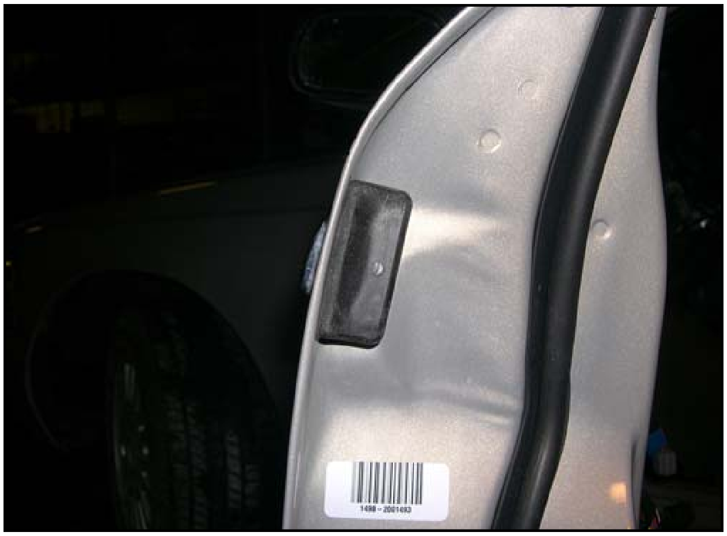
26. Lift upward then outward on door panel to remove. Disconnect power seat plug.

27. Disconnect trunk release plug and set door panel aside.

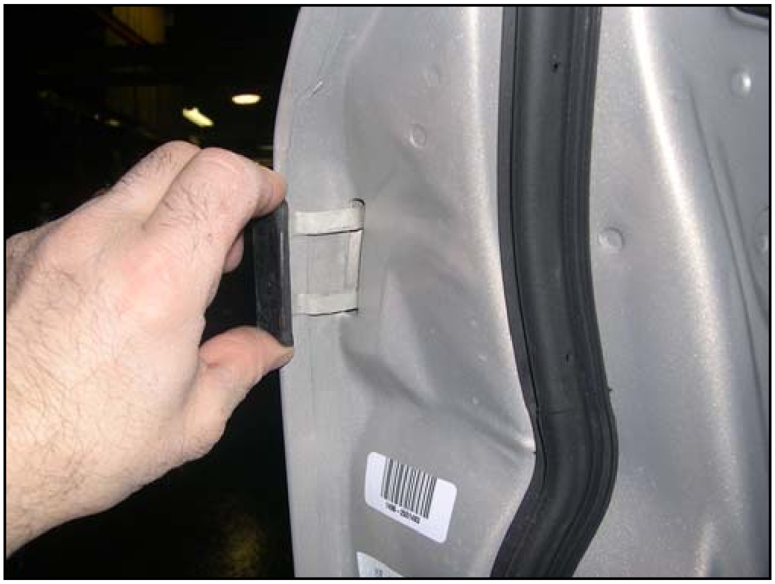




28. Notice inside handle assembly, no linkage to disconnect.

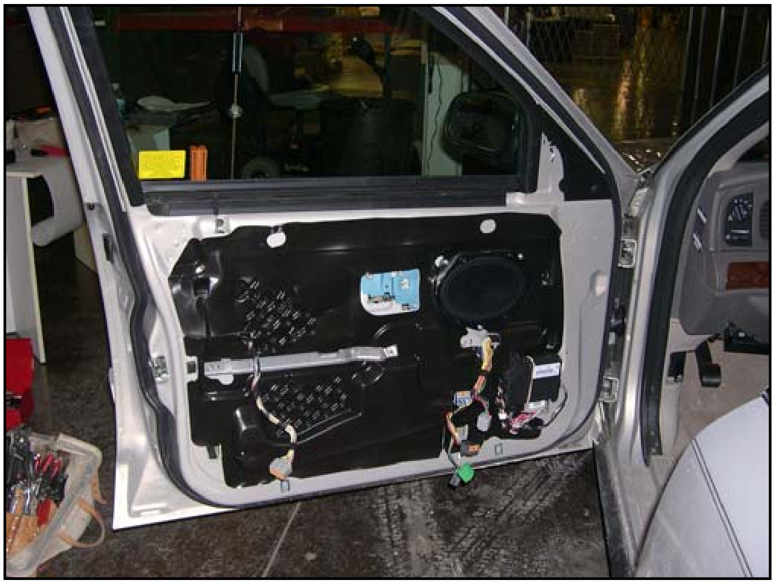


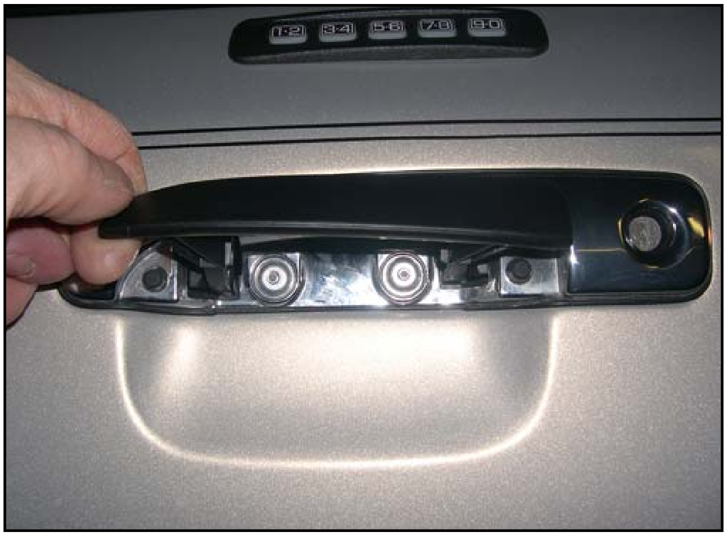
29. View of C-Clip at door edge.



30. Remove door lock C-Clip from door edge.

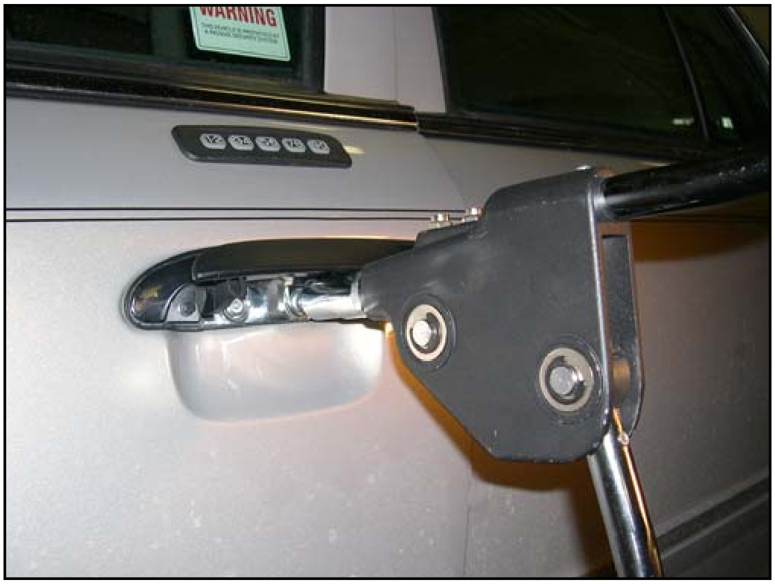
31. Peel back door installation and reach in to disconnect exterior handle linkage from door latch.

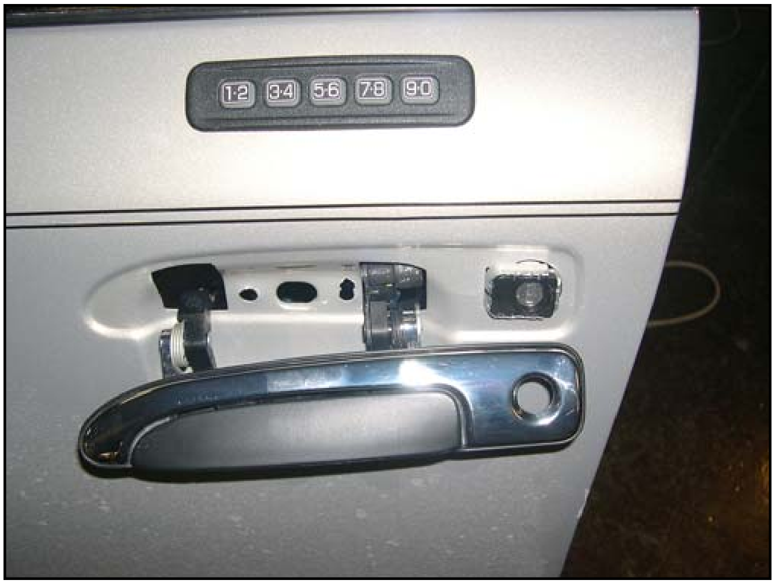




32. Carefully drill out two rivets under exterior door handle.

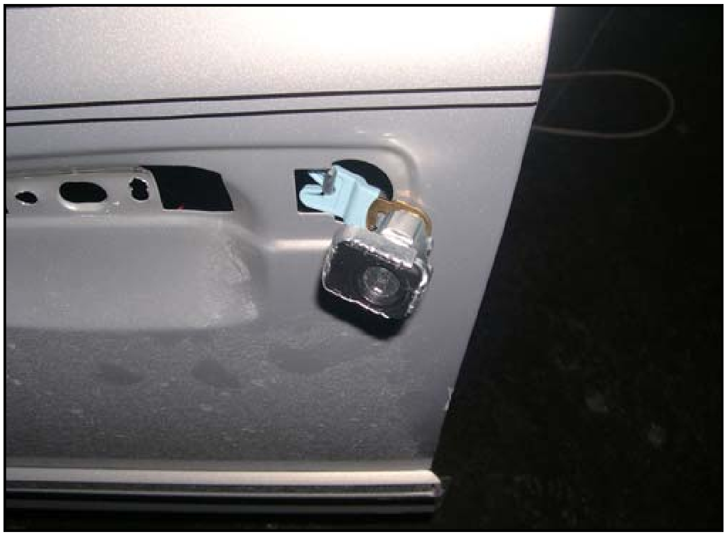
33. View of rivet gun and rivets.

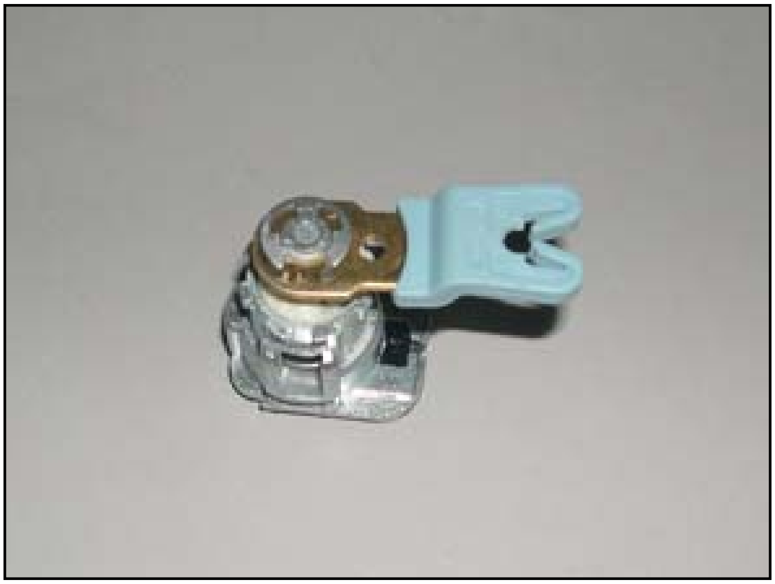




34. Lift on handle and remove.

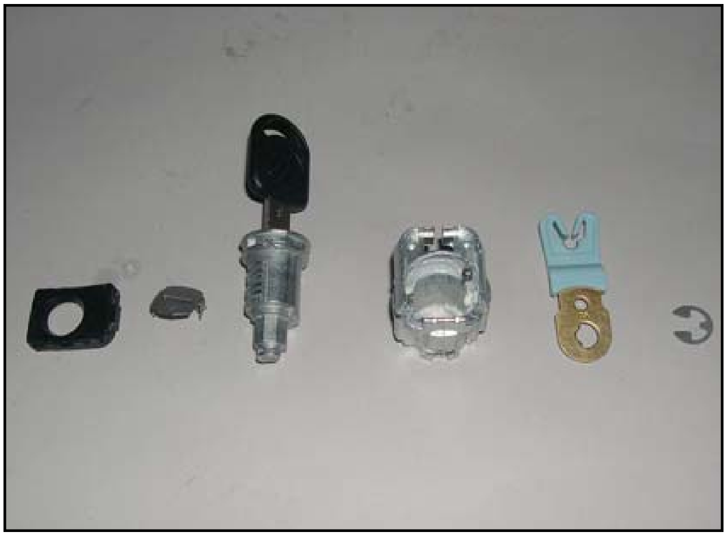
35. Back out door lock and disconnect linkage from driver lever.





36. Remove C-Clip and fixed driver lever.

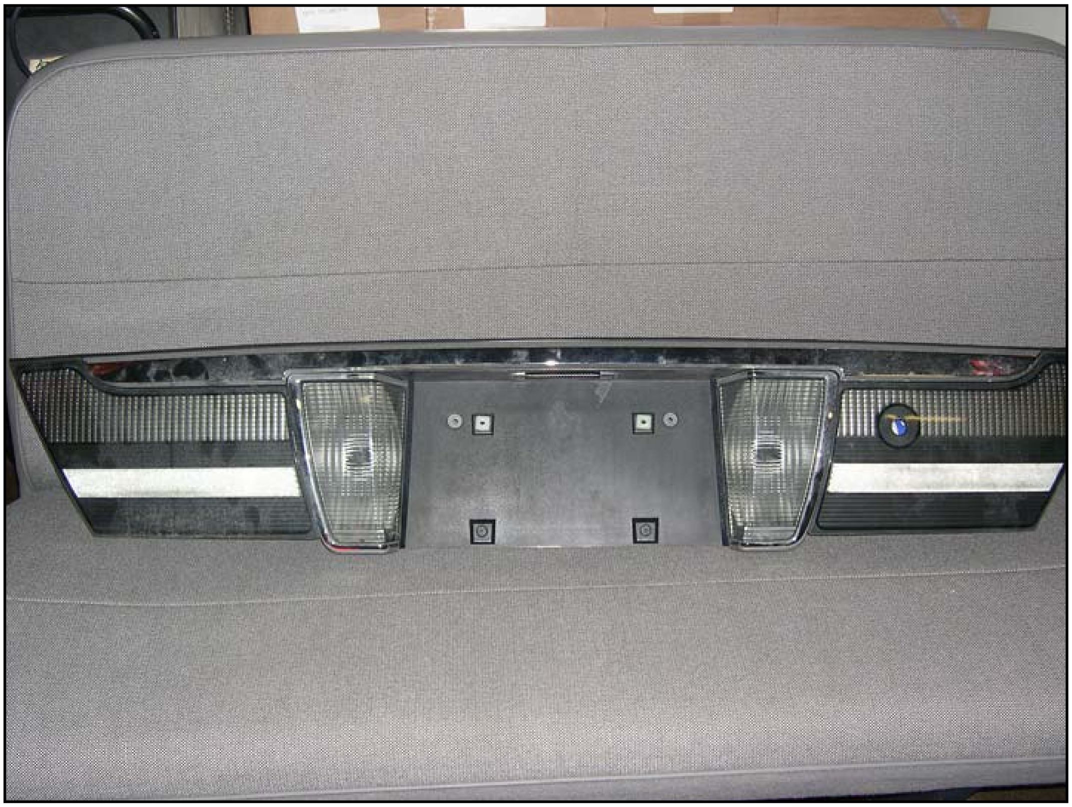
37. Remove plastic shutter cover. Remove shutter. Hold lock upright and rotate cylinder to remove. Remove detent pin and detent spring.



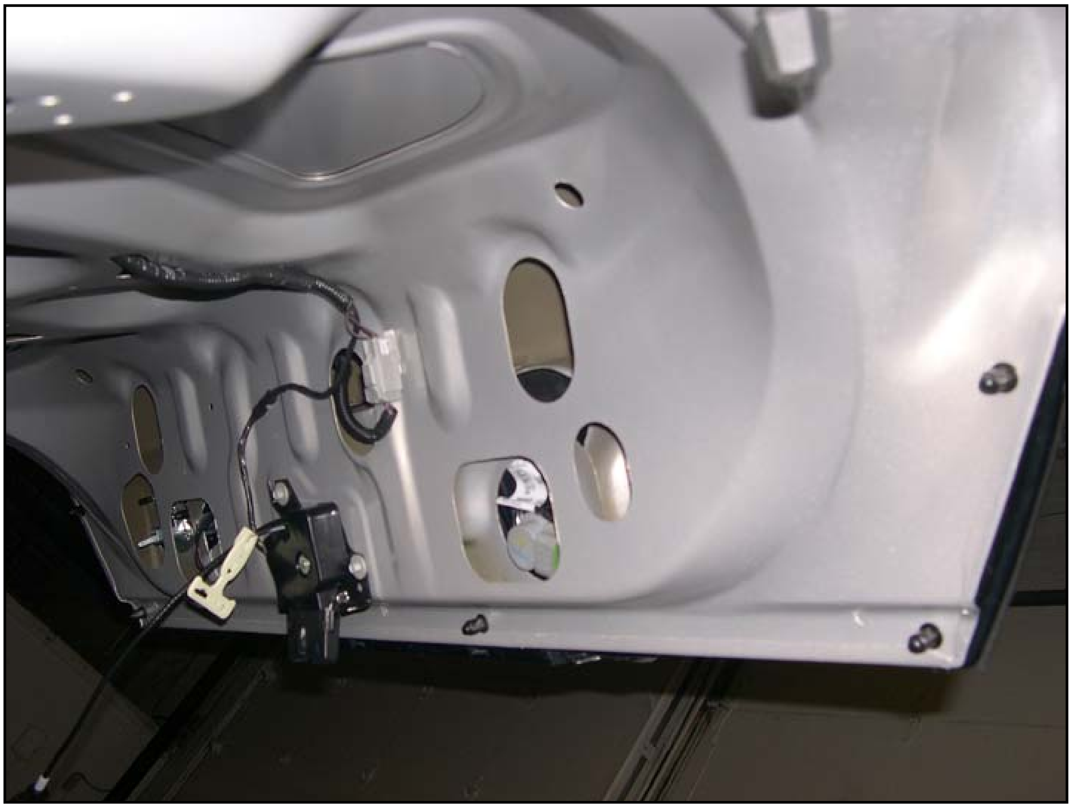
38. View of door lock parts.

REAR HATCH / TRUNK LOCK REMOVAL

39. The rear hatch lock is a wafer tumbler lock.

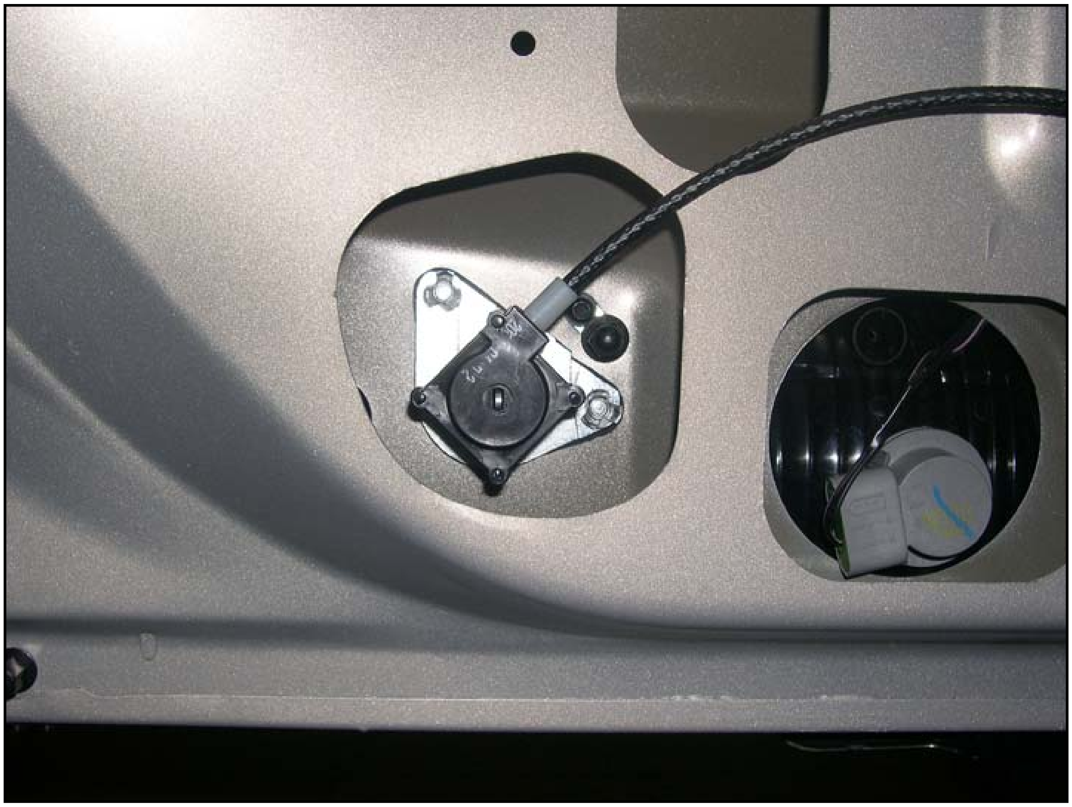


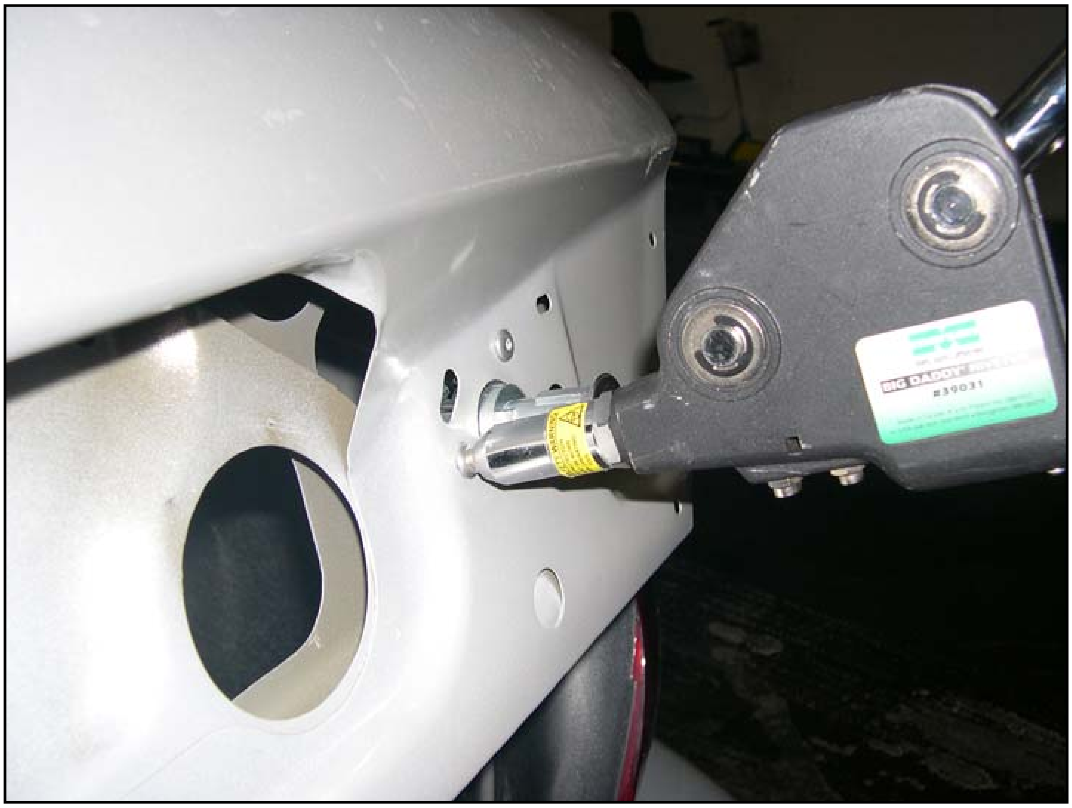
40. Remove license plate.Remove two (5mm) screws and two plastic rivet type clips under license plate.



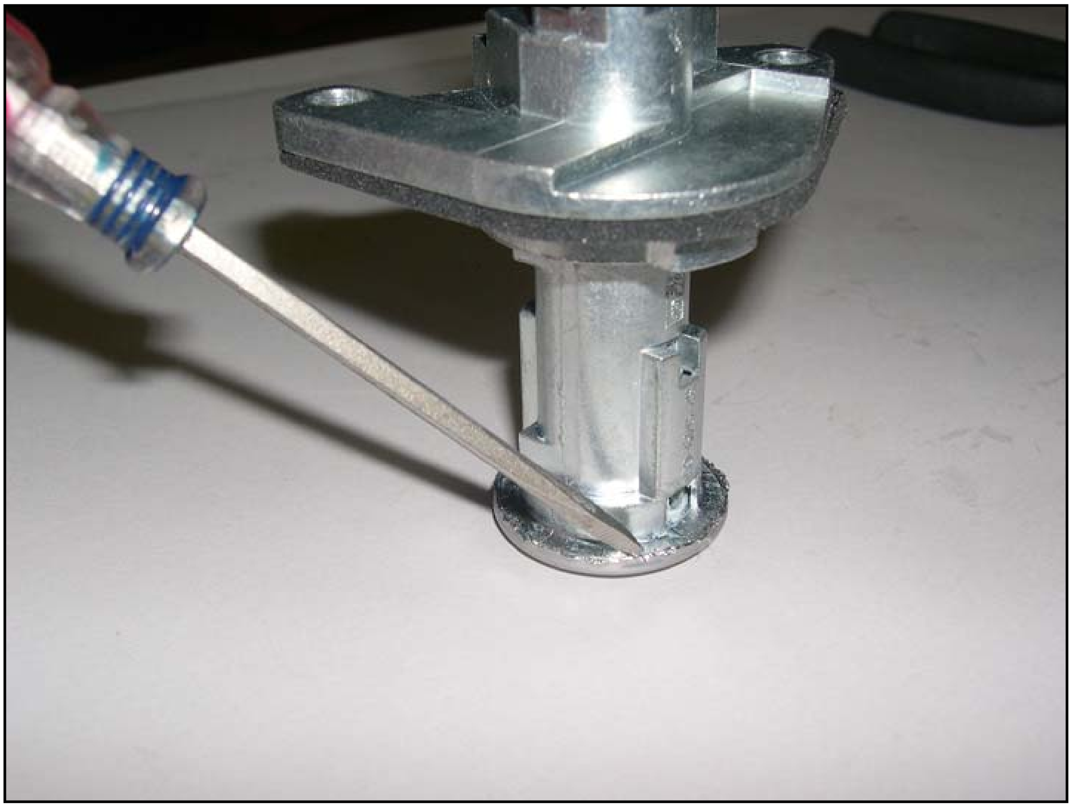
41. Remove eight (10mm) acorn nuts located inside of trunk lid. Remove rear lens assembly and set aside.

42. Disconnect trunk cable actuator (snap on type).

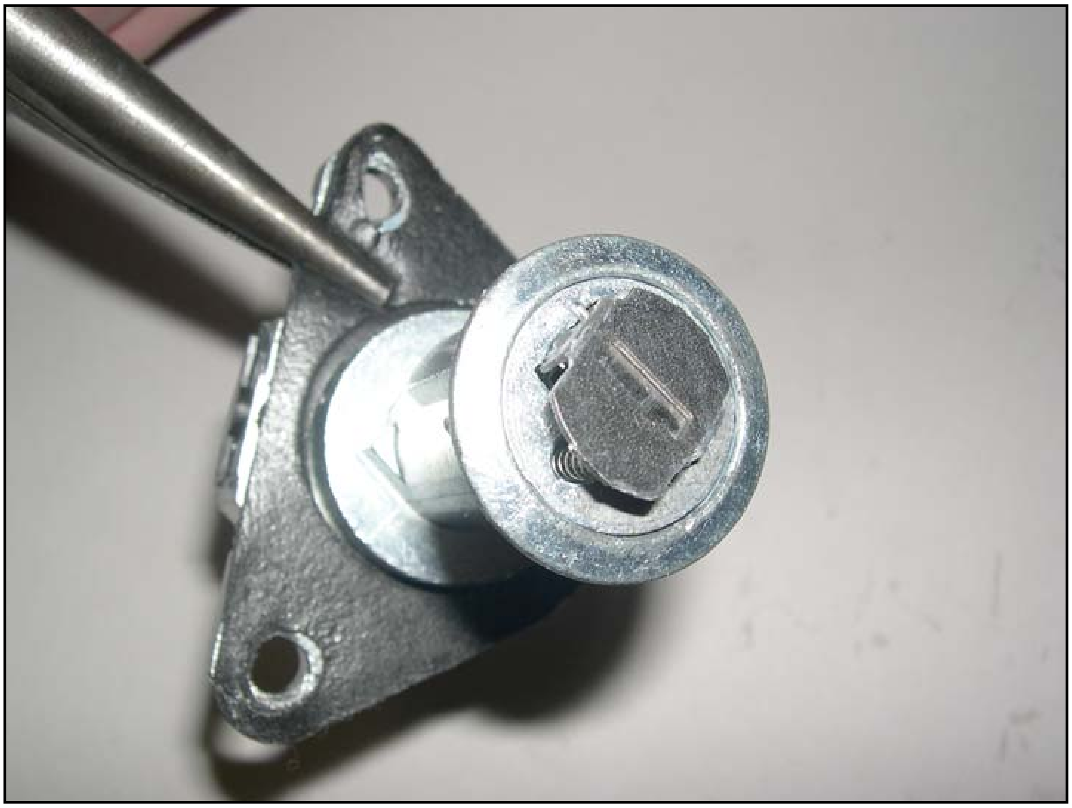




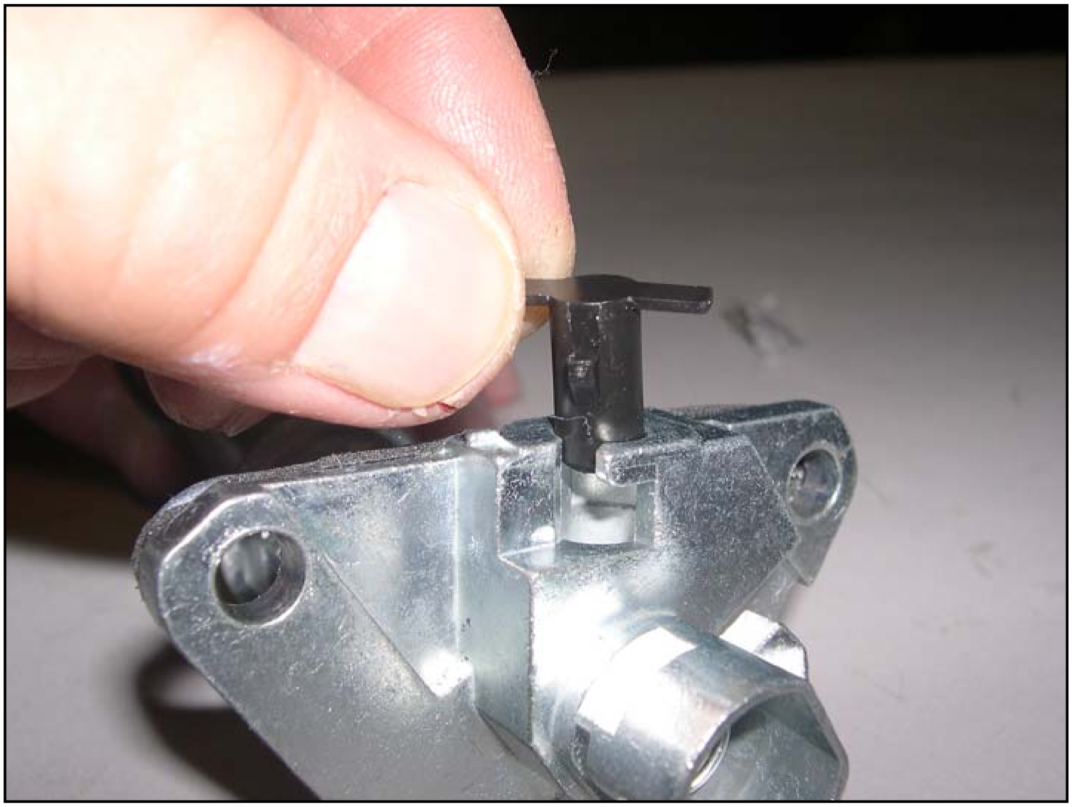
43. Carefully drill out the two rivets on exterior side of trunk lock. Rotate trunk lock counter-clockwise and push forward to remove from inside of trunk lid.



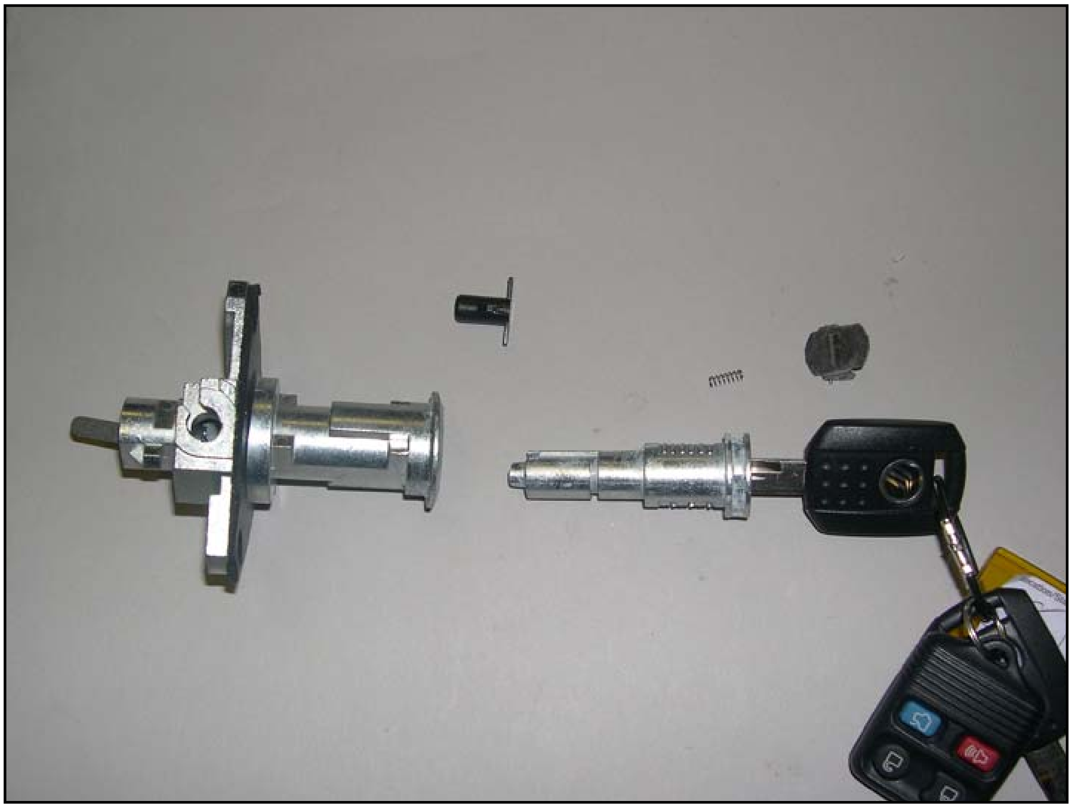
44. Peel back on factory pressed on retainer cap, remove cap, shutter and spring.



45. View of door lock shutter.

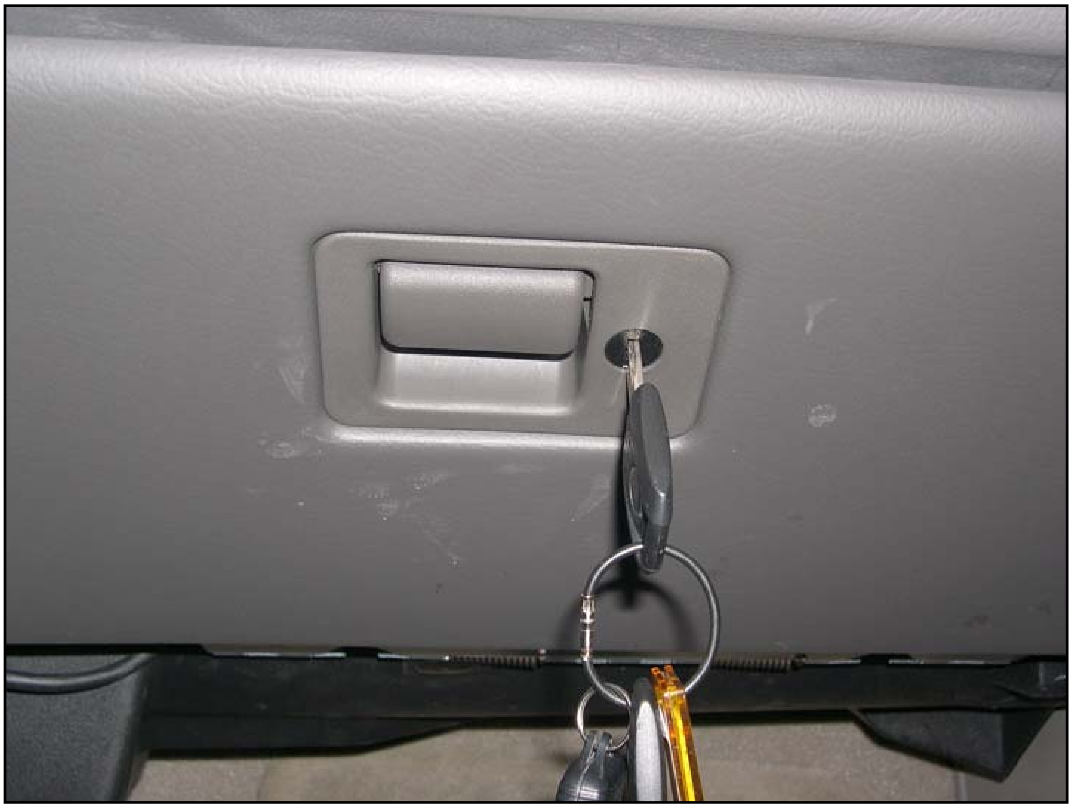


46. Rotate plastic cylinder-driver-spring stop and lift to remove.

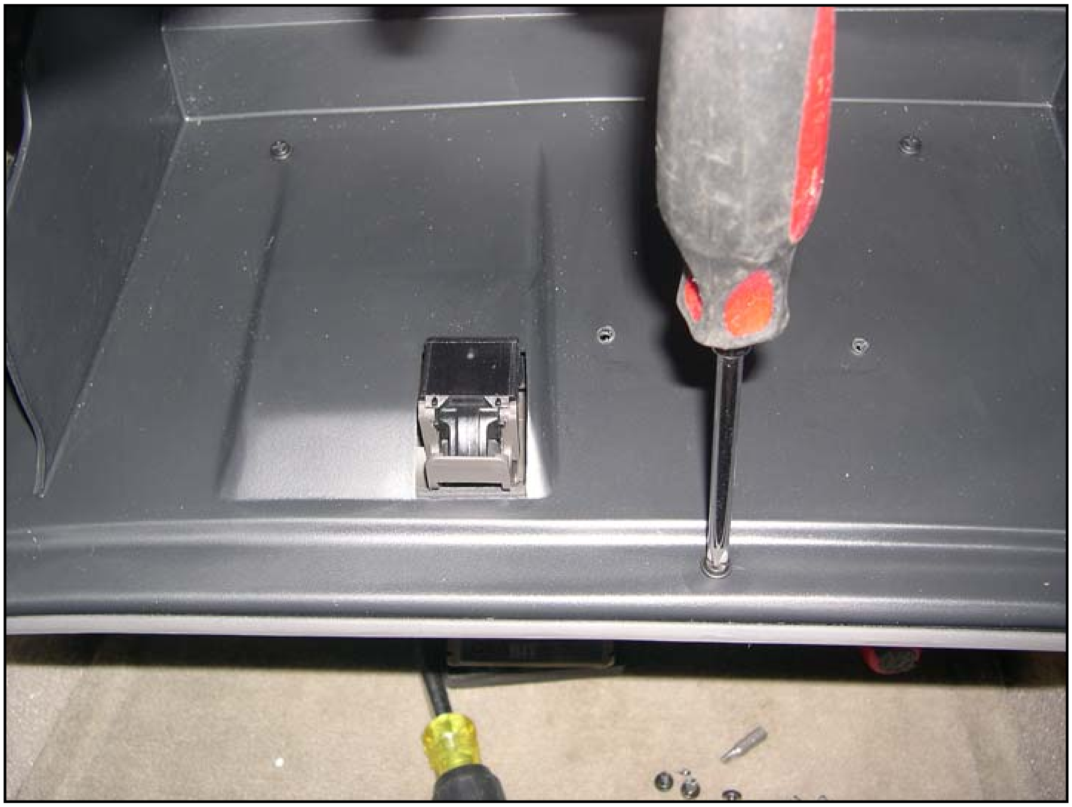


47. View of trunk lock parts.

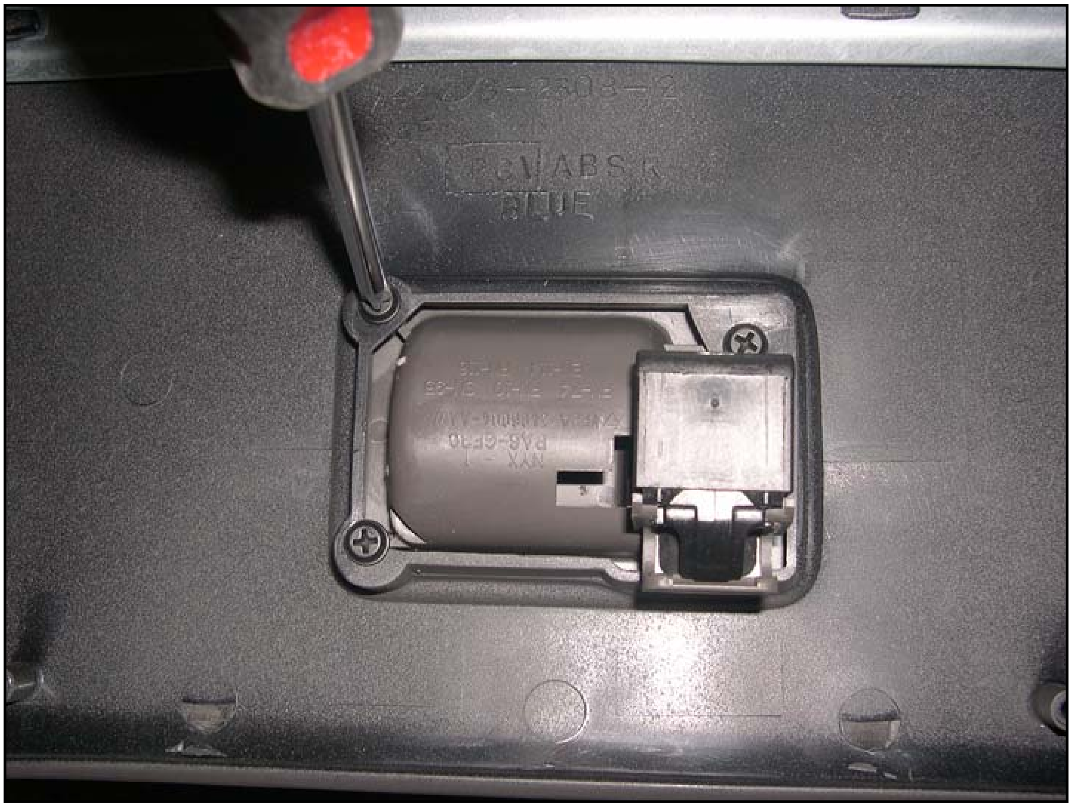
GLOVE BOX LOCK



48. Glove box door and lock.

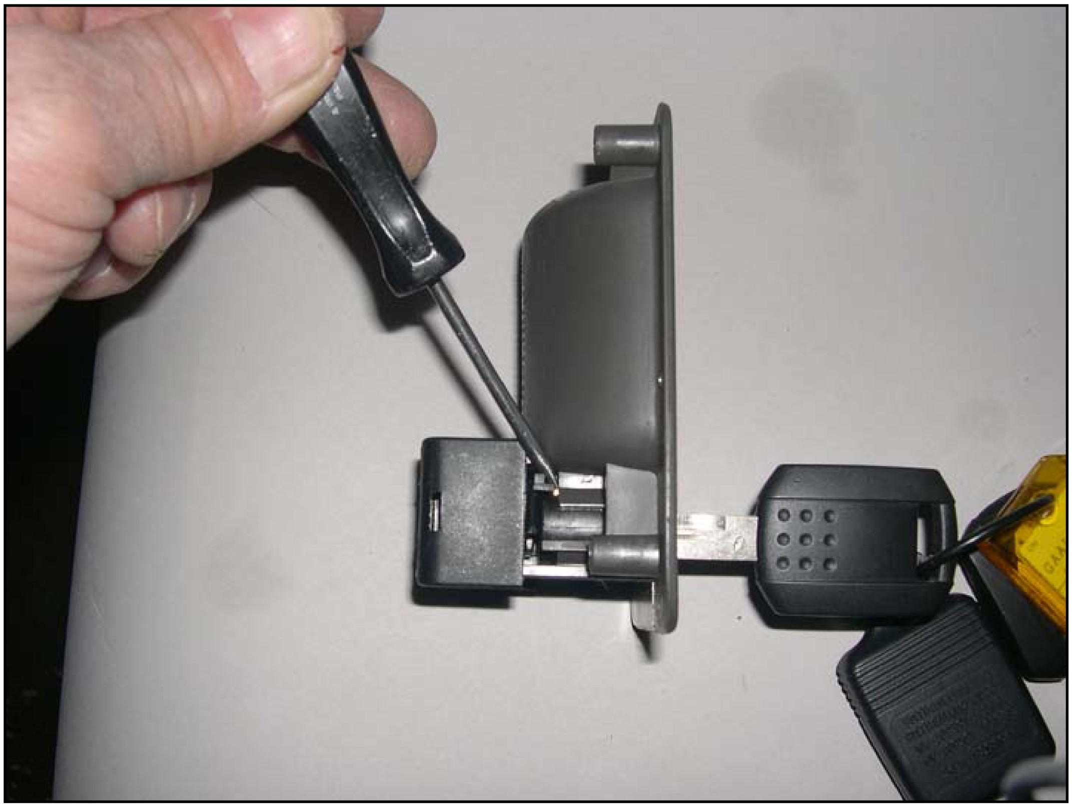


49. Remove six (Phillips) screws and remove inside panel of glove box.



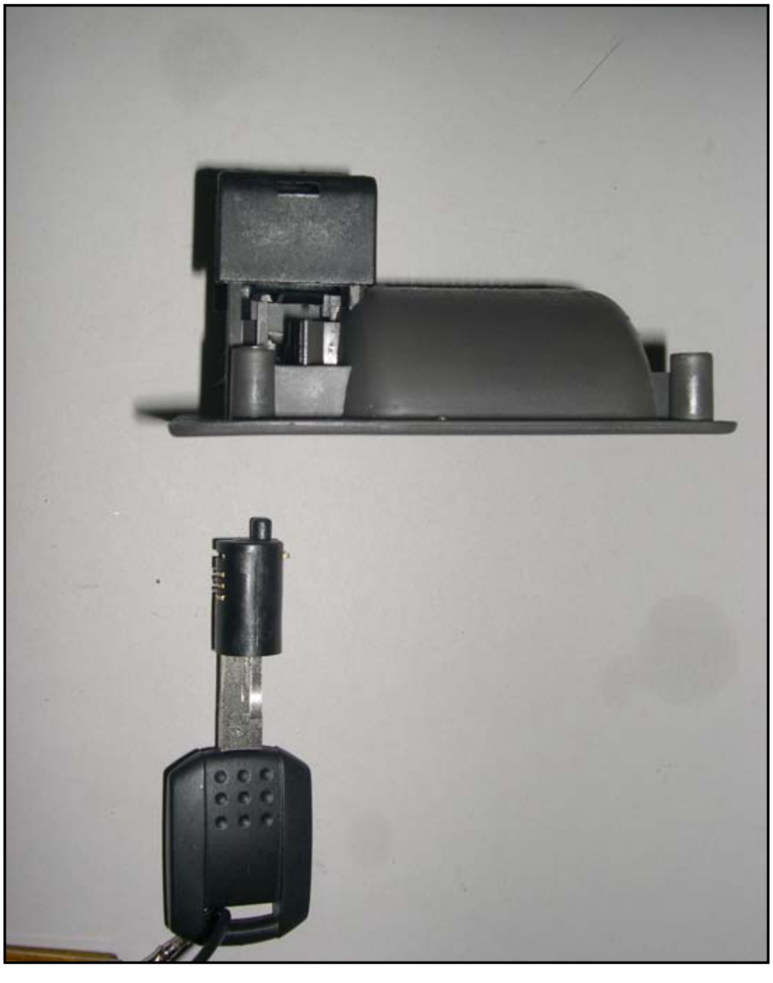
50. Remove three (Phillips) screws and remove glove box lock.

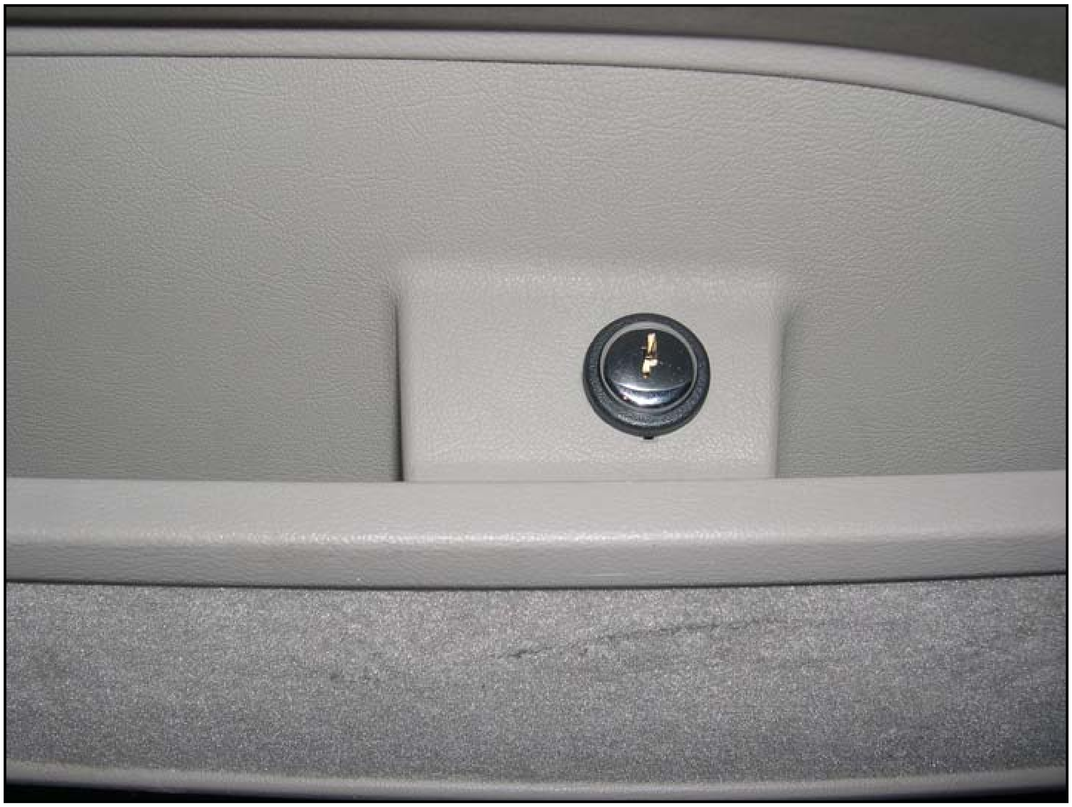
51. Glove box lock removed.



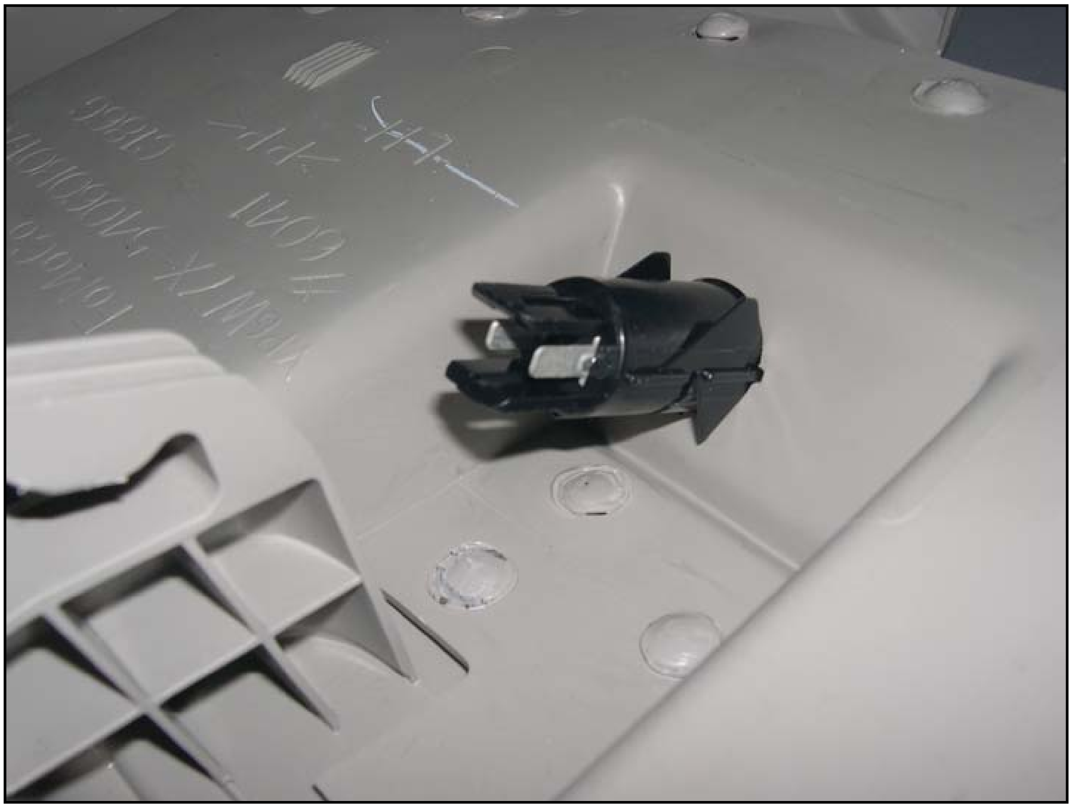
52. Turn cylinder to lock position and depress retainer.

53. The glove box cylinder removed.

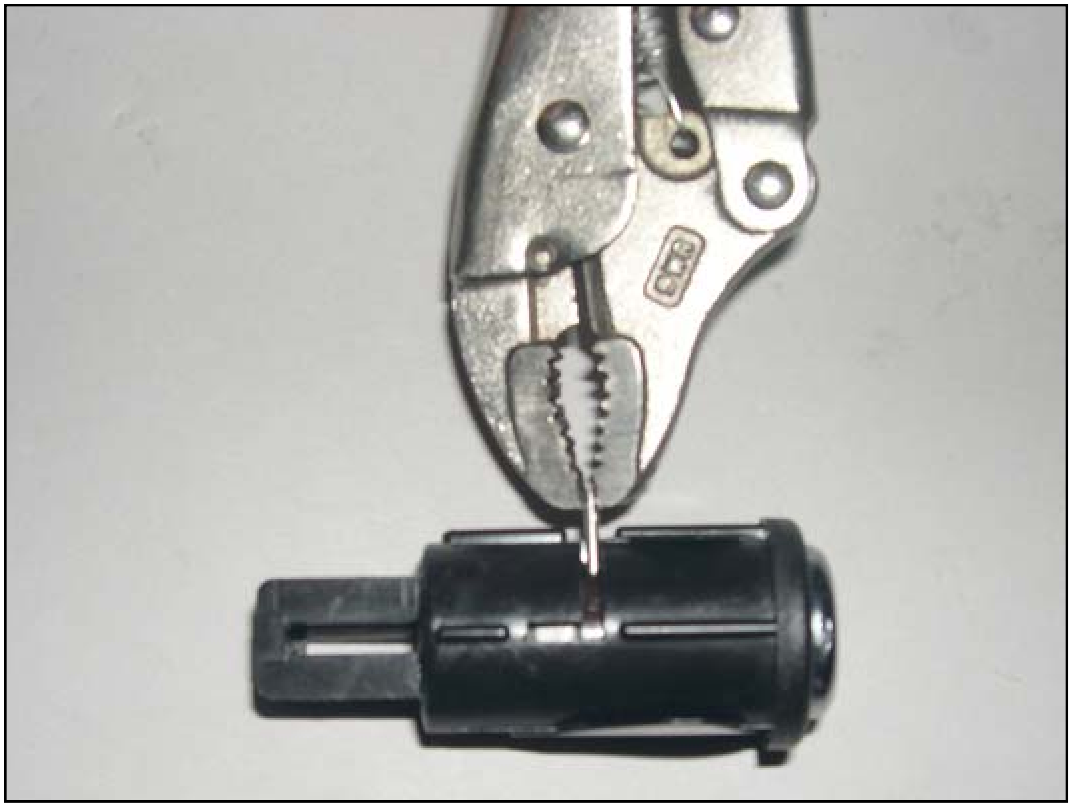




54. The trunk release lock is located on the driver's door panel.

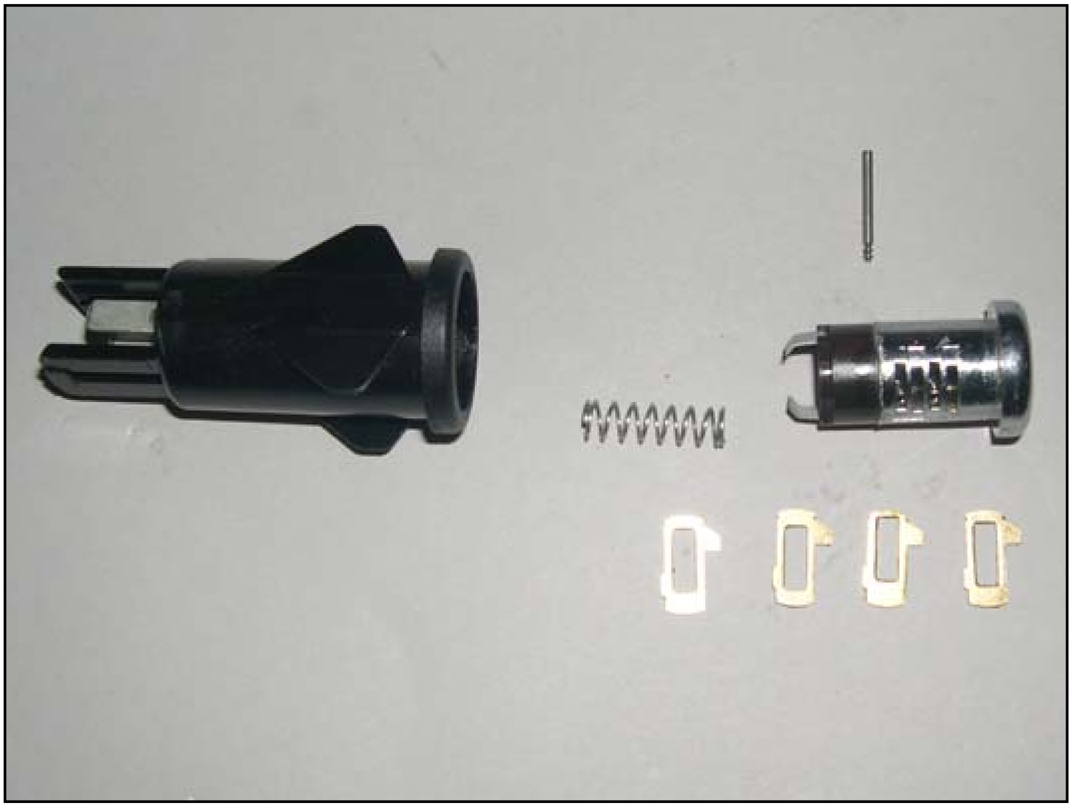


55. Turn cylinder to lock position and depress on cylinder holing wafer to remove cylinder.



56. Remove roll pin to remove cylinder.

57. View of trunk release parts disassembled.



Vehicle Specs:

Year: 2008

Make: Mercury

Model: Grand Marquis LS

Key Code Location(s): N/A

Transponder Type: RW4/EZ-Clone

Airbag(s): Driver, Passenger

Code Range: 1X-1706X

Key Blank(s): Ignition: H84-EK

Door: Same

DSD/1200CMB/PCH Card: 261/CX101/PX101

Cutter: CW-1011/PCH1011

Jaw Type: A

Spacing:
1 = .845
2 = .753
3 = .661
4 = .568
5 = .476
6 = .384
7 = .292
8 = .200

Depths:
1 = .354
2 = .329
3 = .304
4 = .279
5 = .254

Level of Complexity:
2 (1=Easy, 2=Moderate, 3=Difficult)

Cylinder Directions for Picking:
(Clockwise = CW / Counter Clockwise = CCW)

Ignition Lock: Lock: CW Unlock: CW

Driver Side Door: Lock: CW Unlock: CCW

Passenger Side Door: Lock: N/A Unlock:

Rear Hatch Door: Lock: Unlock:

Trunk: Lock: Unlock: CW

Glove Box: Lock: CW Unlock: CCW

Trunk Release Lock: CW Unlock: CCW

DOOR LOCK(S):

Cylinder Tumbler Type: Wafer Tumbler

Tumbler Positions: 1 – 6

Picking: CW to Lock / CCW to Unlock

Lock Positions: Lock / Unlock

Location: In Handle

Code on Cylinder: No

REAR HATCH / TRUNK LOCK:

Cylinder Tumbler Type: Wafer Tumbler

Tumbler Position: 3 – 8

Picking: CW to Unlock

Lock Positions: Unlock

Location: Right side trunk lid under rear light lens.

Code on Cylinder: No

GLOVE BOX LOCK:

Cylinder Tumbler Type: Wafer Tumbler

Tumbler Positions: 6 – 8

Picking: CW to Lock / CCW to Unlock

Lock Positions: Lock / Unlock

Location: Glove box door.

Code on Cylinder: No

TRUNK RELEASE LOCK:

Cylinder Tumbler Type: Wafer Tumbler

Tumbler Positions: 4 – 8

Picking: CW to Lock / CCW to Unlock

Lock Positions: Lock / Unlock

Location: Driver side door panel.

Code on Cylinder: No

THE AUTOMOTIVE EDGE™

04.08

The Official Publication of the
NATIONAL LOCKSMITH AUTOMOBILE ASSOCIATION™

2008 Ford Escape Vehicle Opening

1. The 2008 Ford Escape.

The 2008 Ford Escape is a popular small SUV, *(see photo 1)*. It was redesigned for the 2008 model year. Ford also sells this vehicle as the Mercury Mariner, and Mazda sells it as the Tribute.

The vehicle is equipped with Ford’s Securilock transponder system. The locks are coded and keys cut to code series 0001X—1706X.

When originating a new key with the HPC Blitz™ machine, use card number CX101. If you use the HPC Punch Machine™, then use card number PX101. The CodeMax® and Blue SHARK™ use DSD number 261.

Programming the transponder on a new key requires additional equipment. Adding duplicate keys can be done on-board provided 2 working keys are available.

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Here are the two best websites for Automotive Locksmiths:

www.TheNationalLocksmith.com
Chat, Forums, Editorial,
Online Store, Tech Support

www.Laserkey.com
Product & Technology Sales,
Transponder Information Resources

The plain plastic head key blank is number 164-R7013 from Ford, 599114 from Strattec. The Escape comes with 2 keys with the remote control in the bow of the keys, *(see photo 2).* The replacement number for this blank is 692395 from Strattec.

By removing and decoding the door or hatch lock you will know 5 of the 7 cuts needed for the ignition lock. Using the Bitting Search function in HPC's CodeSource® program, you can quickly and easily find all possible bittings used. The program offers a unique feature to sort the possible bittings in a cutting tree, assuring you will use the minimum number of blanks to find the correct key.

The most successful locksmiths have multiple tools at their disposal so they have multiple options available when performing a task. Knowing multiple entry methods gives you the flexibility to choose the technique that best fits the particular situation. As every lockout presents a unique situation, it is best to know a technique performed in the door and a technique performed through the car.

As detailed in HPC's Car Opening Authority®, the 2008 Ford Escape can be opened using either of these two methods:

THROUGH-CAR OPENING

Through-Car Techniques allow for various attack points; depending on the vehicle there are multiple ways to open it from inside the cabin. When performing a Through-Car Opening first inspect the interior of the car. Locate the power lock switch, the lock buttons, the door handle, the power window switch (particularly if the vehicle happens to be running), or the window crank, as well as the location of the keys (in the ignition, on the seat, etc.) if they happen to be in the car.

Heavily-tinted windows can make it difficult to see the tool in the car and may preclude using a Through-Car technique. It is usually safest to work on the passenger side of the vehicle. However, the interior layout of some cars causes obstructions when trying to attack the driver's side. If this is the case, and the driver's door is facing the street, then it is recommended to use an alternate method (in-the-door) on the passenger side.

On the 2008 Escape, the steering wheel gets in the way when going across from the passenger-side door. So, as long as there is no danger of traffic working on the driver-side door, proceed as follows:

1. Wedge the driver door between side of window and doorframe with the Original Air Wedge® (No. AW-99) and AutoSleeve™ (No. AS-1).

2. Insert a long reach tool, such as the Switch Stick (No. CO-80) through the gap created into the car.

3. Either: Pull the handle on the front passenger-side door, or Push the electric lock switch located on the upper front section on the front passenger-side door.

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2. Key with the remote control in the bow.

IN-THE-DOOR OPENING

The lock button is flush with the door. It can be reached with the HPC Fish Hook (No. CO-86). The button is part of the vertical linkage. The linkage is not shielded. To perform the In-the-Door opening method, proceed as follows:

1. On the front passenger-side door, insert the Original Air Wedge® (No. AW-99) or the Ultimate Auto Wedge (No. AW-38 or AW-34) between the glass and the door 10 inches from the rear edge of the door.

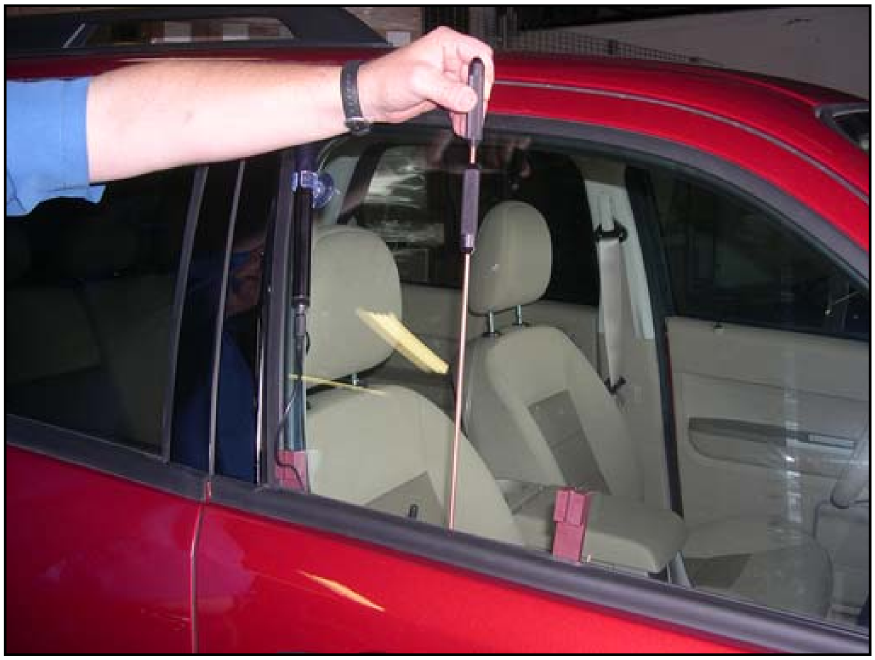
2. Insert a Flex-A-Light™ (No. FAL-15X) at the rear edge of the door. Locate the vertical rod.

3. Insert the Vertical Clutch Tool™ (No. CO-76) with the hook of the tool facing the rear of the car in front of the button, *(see photo 3)*.

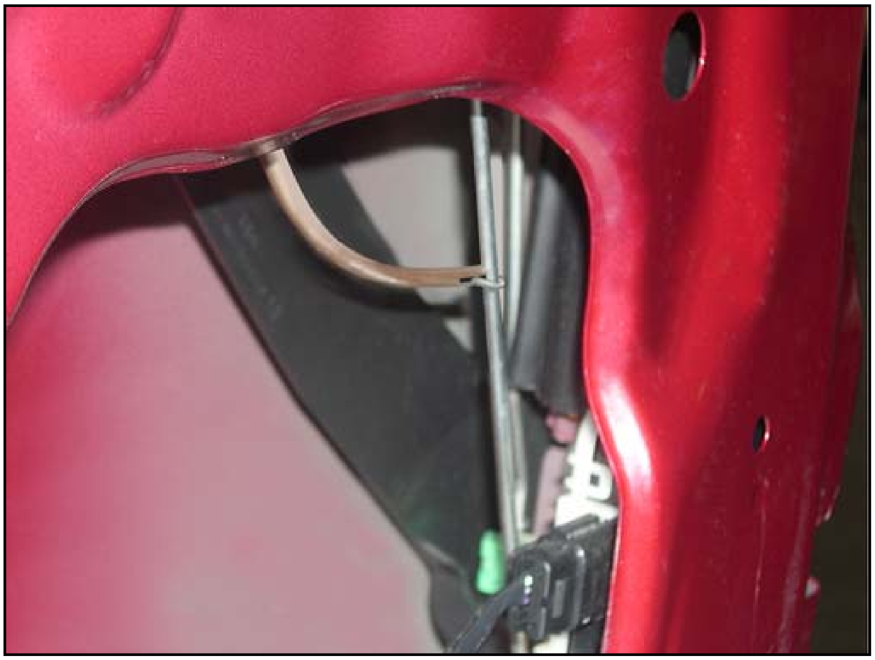
4. Turn tool clockwise and move to the rear of the vehicle.

5. Turn tool counter-clockwise and contact the vertical rod with the hook of the tool, *(see photo 4)*. Separate the handles to bind the rod with the hook.

6. Lift to unlock the door.



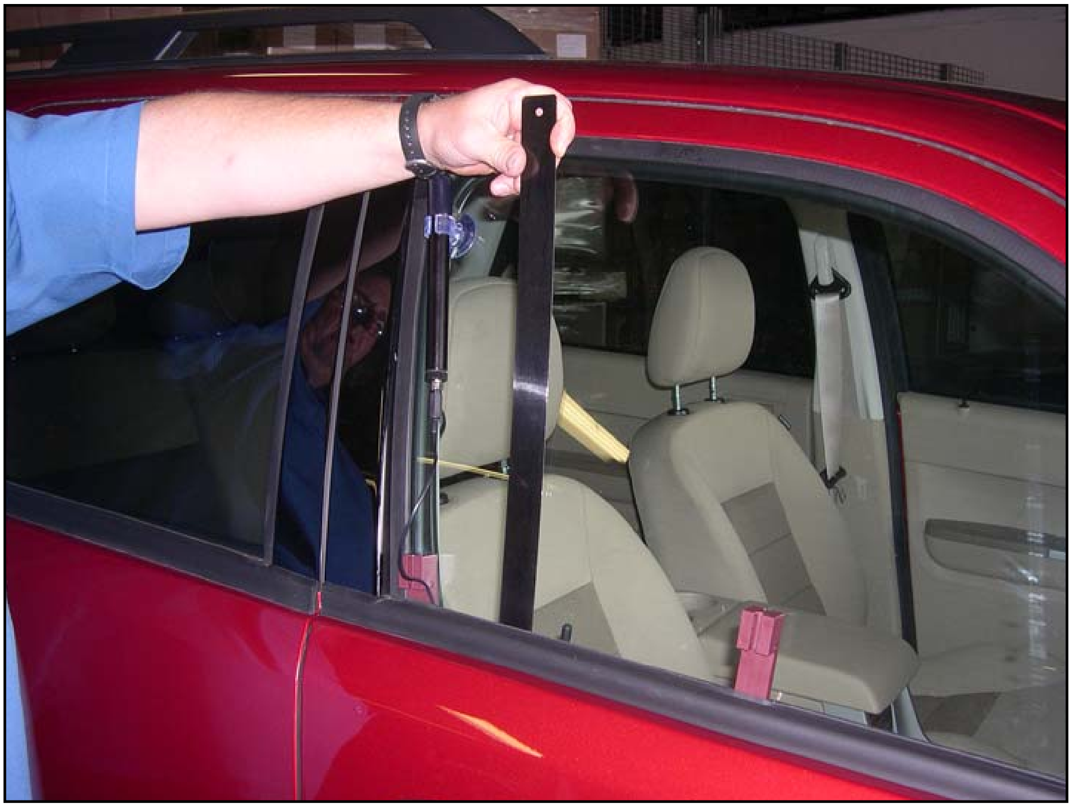
3. Two 3/8" Ultimate Auto Wedges (No. AW-38), Flex-A-Light™ (No. FAL-15X), and Vertical Clutch™ Tool (No. CO-76)



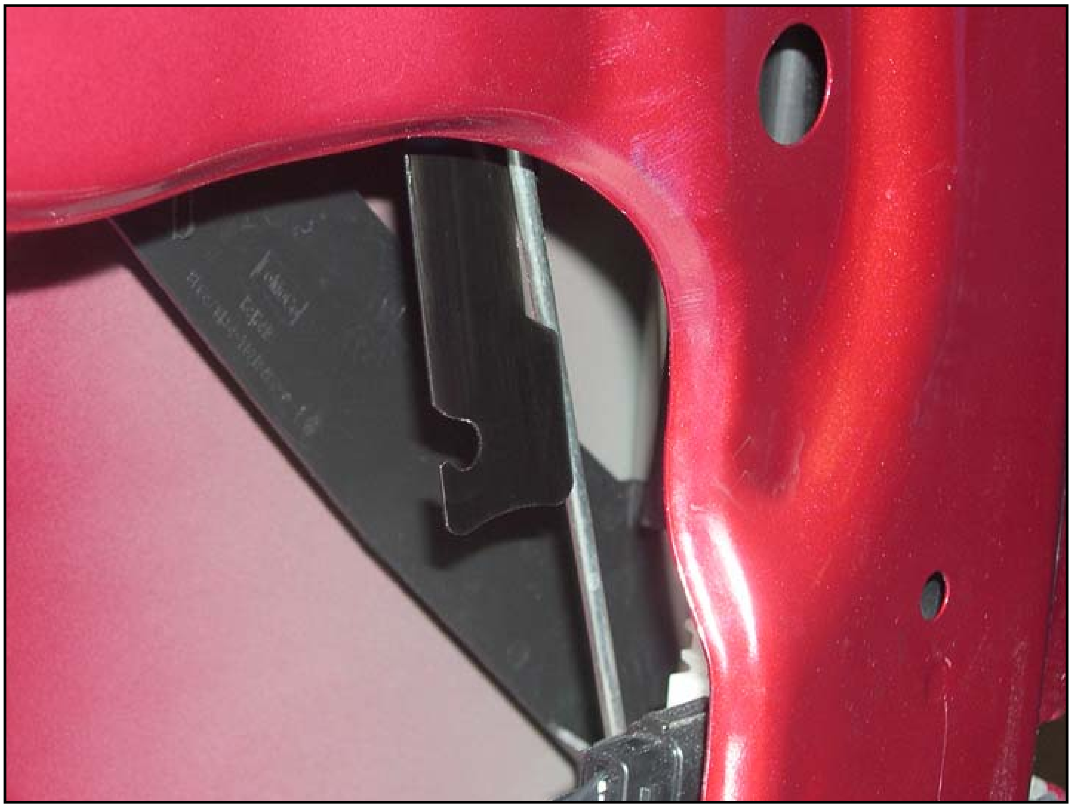
4. The Vertical Clutch™ gripping the vertical linkage.

This procedure can also be used with the Super Jim™ (No. CO-11) or other Jim-Style tools, *(see photo 5)*. Contact the vertical rod with The Super Jim™ gripping the vertical linkage, *(see photo 6)*. Lift to unlock door.

Equipped with the proper tools and knowledge, you are prepared to open this vehicle with confidence.



5. Two 3/8" Ultimate Auto Wedges (No. AW-38), Flex-A-Light™ (No. FAL-15X), and Super Jim™ Tool (No. CO-11)



6. The Super Jim™ gripping the vertical linkage.